ALUMINUM INDUSTRY

HEARINGS

BEFORE

SUBCOMMITTEE NO. 3

OF THE

SELECT COMMITTEE ON SMALL BUSINESS
HOUSE OF REPRESENTATIVES

EIGHTY-FIFTH CONGRESS

FIRST AND SECOND SESSIONS

PURSUANT TO

H. Res. 56

A RESOLUTION CREATING A SELECT COMMITTEE TO CONDUCT A STUDY AND INVESTIGATION OF THE PROBLEMS OF SMALL BUSINESS

NOVEMBER 18, 19, 1957, MARCH 11, 12, 13, APRIL 29, 30, MAY 1, 6, AND 7, 1958

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ALUMINUM INDUSTRY

MONDAY, NOVEMBER 18, 1957

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON MINERALS AND
RAW MATERIALS OF THE SELECT COMMITTEE
TO CONDUCT A STUDY AND INVESTIGATION
OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to notice, at 10:10 a. m., in room 1301, New House Office Building, Hon. Sidney R. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding), Multer, and Riehlman.

Also present: Bryan H. Jacques, staff director; Irving Maness, counsel; Bert Z. Goodwin, special assistant counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The committee will come to order.

This is a meeting of Subcommittee No. 3 of the House Committee on Small Business, convened to look again at the situation of small business in the aluminum industry.

We last had hearings of this subcommittee of the House Committee on Small Business to consider the aluminum industry 2 years ago. At that time, our committee pointed out in its report, which was House Report 2954 of the 84th Congress, 2d session, the tremendous growth of the aluminum industry.

The report stated:

> Both big business—represented by Alcoa, Reynolds, and Kaiser—and small business—represented by the processors or fabricators of aluminum—have made substantial and important contributions to this spectacular expansion and vitality in the aluminum industry.

During these hearings witnesses for the producers pointed out the tremendous expansion contemplated in productive capacity of primary metal and fabricating facilities. Such expansion has taken place and is taking place, but the conditions which impelled and gave rise to our investigation in 1955 have changed.

While there was then an extreme shortage of metal, there is now an overabundance. Where the Government in its basic contracts with the three primary producers was then reserving a significant amount of the producers' output for stockpile needs, at the present time the Government has met its long-term and short-term stockpile objectives and would prefer not to purchase any primary metal from the producers under such contracts. During the past year the producers have exercised their contractual rights by "putting" to the Government, that is, by requiring it to purchase such portion of its

output from new facilities covered by their contracts which they cannot sell on the open market.

In either event, in periods of shortage or of abundant supply, the position of the small independent fabricators is a difficult one. On the one hand, the primary metal is hard to obtain. And when there is no shortage of raw material, the small fabricator must face increased emphasis by the primary producers on the sale of their own finished or semifinished products.

The report further stated:

> There appears no reason to question the fact that the demand for aluminum will continue its steady upward rise.

This conclusion followed from the testimony of an official of one of the producing companies who stated:

> That as a rule-of-thumb two-thirds of any new primary production expansion must be used in the company's own fabricating facilities and that the remaining one-third must be obligated by firm, long-term contracts to other users. This formula affords a substantial basis for financing the expansion. The one-third balance of such contemplated expansion, therefore, may not go to the small nonintegrated user for the simple reason that he cannot usually make the necessary long-term commitments. As a result, much of the metal that will be made available to nonintegrated users under the new expansion will unquestionably go to large nonintegrated users. An example is the contract of the Ford Motor Co. with Reynolds.

These hearings propose to look again at the role of small business in the aluminum industry—the impact upon small business of the contracts of the Reynolds Metal Co. with Ford and General Motors. What impact will such contracts have on the independent smelters, die casters, extruders, and producers of semifabricated and fabricated forms who historically have done business with the large automobile companies? What impact will they have upon other segments of the aluminum industry?

What effect will such contracts have upon the obligation of the three primary producers to the Government? Are General Motors and Ford to be classified as "nonintegrated users" as that term is defined for the protection of small business in the basic contracts between the primary producers and the Government?

The report further declares:

> For example, nonintegrated users would be immediately affected if the demand for aluminum were to rise in the automobile industry in the near future from the present level of 35 pounds per car to a potential of over 400 pounds (David P. Reynolds, Aluminum in Automobiles, Society of Automotive Engineers, Nov. 7, 1955). For a six or seven million car market per year, that would require up to 10 times the nearly 300 million pounds taken by the automobile industry in 1955. The Reynolds contract with General Motors involves up to 40 million pounds per year. The recent contract between the Ford Motor Co. and Reynolds for an average of 64 million pounds per year for 10 years, illustrates the possibilities for sharply increased demand. At the same time, unless the smaller nonintegrated users share in such possibilities, the Ford case also illustrates the dangers of new demands that would squeeze the growth of the other nonintegrated users.

In an advance release of a survey made by Modern Metals dated December 1, 1957, it is shown that within the last 2 years approximately 4,000 firms which were engaged in the consumption and processing of aluminum are no longer so engaged. The survey also indicates that approximately 5,000 new firms have entered the field. The

committee is concerned with the causes of such casualties and hopes to be of assistance in the checking of such a significant mortality rate.

Since the committee's last hearings, the published price of primary aluminum has increased from 19 to 26 cents a pound, a rise of 37 percent in 2 years. As stated in our report:

> The integrated producers make less profits on the sale of primary metal than from their fabricating facilities.

I might state that that came from the testimony of one of the witnesses in the hearing.

In view of the significant rise of the price of primary metal, the committee wonders whether that statement is still valid.

The aluminum industry has frequently been referred to as a growth industry. Small business must be permitted to make its contribution and to share in the benefits of such growth.

Our first witness today is Mr. Joseph H. McConnell, who is general counsel for the Reynolds Metals Co.

Before Mr. McConnell testifies, I wonder whether Congressman Riehlman has anything he would like to say at this time?

Mr. RIEHLMAN. No, Mr. Chairman, I have no comment.

This is my first introduction to the aluminum hearings which were also held in the previous Congress. I am very much interested in the hearings to be held and I hope we can get as much information as possible.

Mr. YATES. Before Mr. McConnell testifies today, I should like the record to show that the committee is in receipt of a letter from Aluminium Limited dated November 14 and signed by Mr. Davis stating the conclusions of the company with respect to its position in the aluminum industry. The letter of the company will be accepted for the record and the company will be given an opportunity to testify at a later date.

(The letter referred to is as follows:)

ALUMINIUM LIMITED,
Montreal, Canada, November 14, 1957.

Hon. SIDNEY R. YATES,
Chairman, House Small Business Subcommittee No. 3,
House of Representatives, Washington, D. C.

DEAR CONGRESSMAN YATES: Mr. Maness of your staff has informed us of your intention to hold hearings next week on problems affecting small business in the aluminum industry. Since our business in the United States is becoming more and more related to the progress of the nonintegrated aluminum companies, for whom we are virtually the sole noncompetitive source of primary ingot, we are naturally interested in the investigation. While not fully informed as to the topics you intend to explore, we thought it might be of some interest to the subcommittee if we made some observations about conditions among the independents and about our services to them.

Before doing so perhaps it would be helpful, especially for the members of the subcommittee who were not present at the hearings in 1955, if we gave a brief explanation of our company and our operations. Aluminium Limited is a Canadian corporation; through its main subsidiary, Aluminum Company of Canada, Ltd., it is the second largest producer of primary aluminum in the world. The company fabricates only a small part of its primary aluminum production; in the United States it does no fabricating and is consequently very interested in the development of the independents for whom it is a natural supplier of ingot. There is no connection between Aluminium Limited and the producers in this country. Since about 40 percent of the ingot production of the company is sold to customers in the United States, this market is

of great importance not only to the company but also to Canada in its trade with the United States.

As the first report of your subcommittee on the aluminum industry states, the period of most rapid growth among the independents was in the years 1950–55. Sales by our company were an important factor in this growth. In 1953, a year of exceptional growth, the company was the largest supplier, providing about 40 percent of the total purchases of primary ingot by the independents. This year our sales are a smaller share of their total purchases of ingot. Our total sales to all customers in the United States have remained at about 200,000 tons for each of the last 5 years, with slightly more than half of this going to the independents, the balance to the domestic producers which have been regular buyers since World War II.

While in the years 1950–55 the independents expanded in numbers and in tonnage of ingot purchased, the last 2 years have seen a slowing down in their rate of growth. According to information issued by the Department of Commerce, the number of companies making up the aluminum industry almost doubled between February 1952 and the middle of 1955. The Department's latest report, issued as of June 30, 1957, shows no increase in the number of enterprises since the middle of 1955. According to the observations of our United States distributing company, Aluminium Limited Sales, Inc., there are, however, as a result of the installation of melting and semifabricating equipment, more independents requiring primary ingot today than there were 2 to 3 years ago. In contrast, there has been a reduction in the buying of primary ingot by foundries and secondary smelters which are once again relying on the generation of scrap for their raw material. The combination of these changes probably explains why the total number of our independent customers is practically the same as it was 3 years ago.

Whereas 2 years ago an independent's principal concern was its metal supply, today the major problem is to maintain and expand sales. Competition between individual companies has intensified as it has in other industries. With reduced profit margins, less capital is being generated to continue the remarkable growth that featured the period 1950–55.

In recognition of these circumstances and of the increasing interrelationship between ourselves and our independent customers, we have endeavored to improve the services we provide to them. We have enlarged our program of technical assistance so that we are today giving guidance on the purchase and operation of equipment, on plant modification, and product development. In certain instances we help to design and develop novel equipment of minimum capital cost—equipment designed to take advantage of the special adaptability of aluminum to small-scale processing. In order to help customers to cut costs and improve quality we have developed ingot products to suit their individual requirements.

In our appearance before your subcommittee in May 1955 we described the steps we were taking to expand capacity to meet the primary metal requirements of the independents and other customers. These plans were later further enlarged so that up until recently we were planning to expand primary aluminum capacity in Canada to about 1 million tons by 1960. Within the last few weeks we have, however, in recognition of the change in supply conditions, adjusted this expansion program so that only 776,000 tons will be put into operation. We are continuing to build the basic hydroelectric and raw material facilities in Canada and in the Caribbean to provide sufficient power and raw materials to produce 1 million tons of primary aluminum a year when a change in conditions justifies resumption of our earlier plans. This ability to create new ingot capacity quickly should help to prevent the recurrence of the shortage problem which was the major concern of your subcommittee in 1955 and should permit us to be in the future an increasingly reliable source of metal for the independents. As their noncompetitive supplier, we plan to continue our program of technical assistance to encourage their further growth.

Very truly yours,

ALUMINIUM LTD.
NATHANAEL V. DAVIS.

Mr. YATES. Mr. McConnell, the committee would be delighted to hear from you as our first witness. We will be pleased to hear what you have to say.

TESTIMONY OF JOSEPH H. McCONNELL, COUNSEL, REYNOLDS METALS CO.; ACCOMPANIED BY GUSTAV B. MORGRAF, GENERAL SOLICITOR; IRVING LIPKOWITZ, ASSISTANT TO THE PRESIDENT; AND MAXWELL CASKIE, ASSISTANT VICE PRESIDENT

Mr. McCONNELL. My name is Joseph H. McConnell, I am counsel for Reynolds Metals Co. I am here as a member of the executive committee of that company in response to Chairman Yates' letter inviting a representative of the company to appear before your committee.

Mr. Yates' letter stated that the committee is interested in receiving information on the future of the aluminum industry and the position of small business in that future.

The future of the aluminum industry is bright. It is a future, as we see it, of bigger opportunities for all in the industry—for the small, the medium sized, and the big.

Twenty years ago there was one primary aluminum producer in the United States. Today there are 4, and within a few months there will be 6.

Twenty years ago there were a dozen nonintegrated fabricators whose business was primarily aluminum. Today there are almost 200, with thousands of others manufacturing and selling products using aluminum.

Current aluminum consumption in this country is at the rate of almost 2 million tons a year, an increase of 135 percent over what it was in 1947. Remarkable as this growth has been, the tonnage increases which can be realized in the years ahead are several times as great.

Our analysis of potential markets brings us to the following estimate of aluminum consumption in this country:

3,400,000 tons by 1960—70 percent more than 1957;
5,000,000 tons by 1965—more than 2½ times that of today.

These are the estimates, according to our marketing specialists and technical experts—based on the unique properties and known applications of aluminum. These potential markets will be realized with proper research and development work backed up by vigorous marketing and merchandising efforts.

This growth and these products are not surprising. Aluminum is unique among the basic raw materials. Its properties will attract more and more demand. Its applications are economical and lasting.

Not many years ago our company was a small business. Reynolds' growth has been paralleled by scores of enterprises that have profited from the expansion of the aluminum industry. The nonintegrated fabricators have steadily increased their share of the total market. Shipments by the fabricators of sheet, foil, extrusion, wire and cable and by the nonintegrated foundries, have increased 122 percent since 1950. Shipments by the integrated producers of the same classes of products have increased 37 percent.

For the benefit of the committee, Mr. Chairman and Congressman Riehlman, we have indicated the figures which I have just stated to you by the chart there on the right, which shows that the shipments of the nonintegrated fabricators have risen from approximately 363,-

500 tons to 807,500, an increase of 122 percent, and integrated from 709,000 tons to 971,000, an increase of 37 percent.

Mr. YATES. I think you would prefer not to have questions asked of you until you complete your statement?

Mr. MCCONNELL. I would appreciate it, sir, if you would be so kind.

In extrusions, the nonintegrated companies' share of the market has climbed from 35 percent in 1950 to over 64 percent today.

The nonintegrated companies are important to us. Many of them are our customers not only for primary aluminum but also for mill products. Those who have remelting and casting facilities purchase pig and ingot. Others who do not have these facilities purchase such products as sheet, rod, and extrusion billets.

Important to us also are the manufacturers who use aluminum in their products. These have multiplied from 4,500 10 years ago to over 25,000 today.

All of these companies, both large and small, make up the market for the products we manufacture.

All aluminum companies have contributed to the growth of the industry. Your committee summarized the situation very well in your July 1956 report, Small Business and the Aluminum Industry. The report stated:

> Both big business—represented by Alcoa, Reynolds, and Kaiser—and small business—represented by the processors or fabricators of aluminum—have made substantial and important contributions to this spectacular expansion and vitality in the aluminum industry (p. 5).

Future growth likewise will be the product of the effort put forth by all segments of the industry. The resourcefulness and abilities of all the companies, regardless of size, will be needed to realize the future market potentials. We share the wish of your committee that all aluminum companies be given the opportunity and incentive to continue expanding aluminum markets.

EXPANSION FOR PEACETIME, 1945–57

As a preface to the future of the aluminum industry, we should look to the growth which has occurred with the expansions for peacetime markets since the end of World War II.

The story of the aluminum industry has been one of energy, enterprise, ingenuity, and risk. The key to the future lies in the industry's ability to continue to create and expand regular peacetime markets. Although a large part of the capacity expansion during the past 22 years originated with wartime mobilization programs, over 90 percent of the aluminum consumed today goes into regular peacetime uses. The development of these civilian markets is an industry accomplishment, achieved mainly since the end of World War II and particularly during the last 5 years.

This postwar period of growth had its initial impetus at a Small Business Committee hearing, similar to this one, held on the Senate side in February 1945. The founder of our company, the late Mr. Richard S. Reynolds, Sr., testified at that hearing. Many thought then that the outlook for the industry was a dismal combination of excess capacity and huge surpluses of war scrap; that the Government war plants should be put in mothballs for at least 5 years.

Mr. Reynolds was a bold dissenter, predicting that:

> The day may not be far distant when the United States will require several times as much aluminum a year as our peak war production.

Mr. Reynolds backed up his optimism by being the first to lease and put back into production some of the Government's plants. In some instances our company was the only company responding to the Government's invitation to bid and in each instance, of course, the highest eligible bidder for the plants we acquired.

Subsequent events proved Mr. Reynolds to be correct. All of the economical reduction plants were put back into use, and in less than 5 years additional capacity was being built to meet the rising demand.

After World War II the Government's policy was to offer fabricating plants first to those who leased the primary producing plants "to enable them to integrate their business more favorably" (report of the Surplus Property Board to the Congress, Sept. 21, 1945, p. 52.)

The result has been the creation of companies having sufficient earning capacity to obtain the financing needed for large-scale expansion of facilities for production of primary aluminum.

In addition to supplying the bulk of the raw materials which the nonintegrated companies use, the primary producers in large measure have developed the markets in which all fabricators sell their products. As this committee's 1956 report stated:

> An important force in the advance of aluminum unquestionably has been the introduction of Reynolds and Kaiser as competitors to Alcoa. There have been 3 primary producers instead of 1 engaged in market promotion and product development (p. 5).

These three companies have provided most of the funds and personnel for the research and most of the advertising and market development which had to be done in order to expand postwar markets to their present size.

From the viewpoint of small business, the presence of the additional integrated producers has meant more sources of supply and a more plentiful supply of aluminum. This is demonstrated by Reynolds' record as a seller of primary aluminum to nonintegrated fabricators. Before World War II, Reynolds was a nonintegrated fabricator, competing against other fabricators for whatever metal was available. Since the war, as the earlier record of this committee shows, we have sold large tonnages of primary aluminum to nonintegrated fabricators, even on occasion to the detriment of our own fabricating operations.

Here is how our sales of primary aluminum to nonintegrated users have increased steadily.

To our left I have indicated on the chart how our sales of primary aluminum to nonintegrated users have increased since 1946. The percentage increase is very substantial.

	Primary sales—(pig, billet, etc.) Tons
1946	4,500
1950	33,500
1955	98,200
1956	114,050

When the Korean emergency arose, there were three primary producers in this country who were ready to take on the tremendous job of expansion to meet the mobilization needs. What is more impor-

tant is that the mobilization expansion was carried out in a manner which resulted in construction of permanent facilities beyond the then existing market requirements—capacity which could be utilized in the subsequent peacetime economy.

We and the other primary producers willingly responded to the Government's call to build additional production capacity to meet the national emergency even though it resulted in creating capacity which exceeded the peacetime demands at the time. While the Government provided certain assurances to the companies through the contracts which, in effect, guaranteed for a period of 5 years the sale of the metal from the additional production capacity created by this expansion, the primary producers took on the substantial burden of obtaining from private sources the funds needed for the expansion and the financial risks involved in long-term power contracts and utilization of the plants for peacetime purposes.

A byproduct of the Korean expansion, of course, was the agreement by the primary producers with the Government to make available to nonintegrated companies for 15 years following the end of the first 5 years, a quantity of metal equal to 25 percent of the output from the expanded capacity. This has now been increased to 35 percent by mutual agreement.

During the first 5 years, when the Government has a first call on all the output, the producers are obligated to offer to nonintegrated users two-thirds of the additional production less what the Government takes. The nonintegrated users have no obligation to buy any of the metal which the producers must offer to them during the 20-year period.

After the Korean emergency the companies once again turned to development of peacetime markets for aluminum and promotion of its use for more and more purposes.

One of the most important of all the developments from a long-range point of view involved the transportation industry and the automobile companies in particular. Reynolds has had a major part in promoting the use of aluminum by the transportation industry, and I would like to tell you something about our work with the companies and the importance with which we regard this work.

THE 1955 SHORTAGES AND EXPANSION OF PRIMARY CAPACITY

The history of our company has been one of continual growth and expansion of capacity. Our efforts have been directed steadily toward the goal of enough metal for all needs.

Despite the sharp expansion resulting from the Korean emergency, the industry in 1955 again found itself facing a familiar problem. It was unable to meet the demand.

This committee knows well the picture of the aluminum industry in mid-1955. Our main concern was to find means of expanding capacity and increasing output. At that time Reynolds had just completed a refunding program and had a total debt of approximately $250 million. We were engaged in a $62 million improvement program including an increase in our primary aluminum production capacity at existing plants.

We recognized that we could not stop there. Looking to anticipated demands in the future, we were busy with plans to expand our primary capacity further.

By this time construction costs had increased greatly. We estimated that upwards of $100 million would be needed for construction of another reduction plant and related bauxite mining and alumina facilities. We knew, too, that one more plant would not be enough and that we would have to plan for even more in the near future.

Toward the end of 1955 we were able to work out an agreement with Ford Motor Co. providing for sale to Ford of 64 million pounds of primary aluminum a year for 10 years. This assured outlet for more than one-fourth of the output of a new 225-million-pound reduction plant proved to be a most important factor for us in obtaining financing for the new plant.

This contract and a later one with General Motors Corp. had a most important bearing on the expansion of our reduction facilities, and thus upon the supply of primary metal. The background is an interesting story of progress in the aluminum industry.

For many years the industry had followed the practice of selling primary aluminum as three different products:

Pig—which is aluminum poured directly from the reducing pot and hardened;

Ingot—which is generally made from remelted pig and is characterized by a controlled analysis for the presence of alloys and impurities; and

Billet—which is a form of ingot specially shaped and treated for use in the extrusion process.

Each of these commodities is sold at different prices. The contracts with General Motors and Ford established a fourth primary aluminum product.

In 1948 General Motors initiated discussions with our company with the view of securing additional supplies of aluminum ingot needed in the manufacture of a transmission system. During the course of these discussions it became recognized by both parties that molten aluminum as a commodity might possess advantages for this purpose over either pig or ingot. Billet, the third then-existing primary aluminum commodity, is not used in making castings.

Previously, we had sold aluminum to General Motors in pig or ingot form, and after acquiring the metal in that form General Motors remelted it and cast it into finished parts. It occurred to both parties that direct sale of molten aluminum for this purpose would enable both seller and buyer to eliminate the time-consuming and costly steps of pouring and molding the metal and cooling, handling, storing, transporting, rehandling, and remelting it back to the original molten state.

The discussions resulted in a contract dated February 7, 1950, between our company and General Motors providing for sale of molten metal on an experimental basis. This was the first sale of molten aluminum. The contract was for 3 years. It covered the sale of a minimum of 7,500 pounds and a maximum of 25,000 pounds of molten aluminum per day, with the provision that if General Motors could not use all of the molten metal, the remainder would be taken in pig. The specifications for the content of the metal provided for chemical compositions particularly suited for casting operations which permit a relatively wider range of elements to be present compared with metal sold for general purposes.

The price for the molten aluminum was determined in this contract, as also in each of the subsequent contracts for sale of molten aluminum, according to a formula which reflects the chemical composition and the savings resulting from elimination of freight and other factors. This contract and also the later molten aluminum contracts made provision for the possibility of purchase of some of the metal alternatively as pig. In such event, the price is the regular price for pig.

Operations under this contract were successful and Reynolds and General Motors then entered into an agreement, dated July 23, 1952, covering the purchase and sale of molten aluminum for a 5-year period from January 1, 1954, and thereafter until either party cancels upon 1 year's notice. This contract is for the molten aluminum to be used by General Motors at a foundry which it built for the purpose near our Jones Mills reduction plant. The contract provides for a maximum of the output of 1 potline, about 40 million pounds a year.

When the need arose in 1955 to find substantial backing for a new aluminum reduction plant, we were ready to demonstrate to the Ford Co. that an arrangement for sale of molten aluminum would be mutually beneficial.

Metal for the contract with Ford is to be produced by Reynolds at its new 225-million-pound reduction plant being completed at Listerhill, Ala. Ford has constructed a foundry adjacent to the Reynolds plant for use of the molten metal.

As I have said, the Ford contract was a most important factor for us in obtaining financing for our new Listerhill reduction plant. The existence of the contract was one of the conditions required of our company by the lending institutions from whom we borrowed $75 million of the amount needed for the expansion. Thus it enabled us to obtain a large part of the necessary money at a reasonable interest rate. It was an element essential to the expansion of our facilities by 225 million pounds—enough to fill the requirements of the contract for 64 million pounds annually with 161 million pounds left over for other uses.

While arrangements for the new Alabama reduction plant were being finalized, we were making plans for still further expansion. Within a year we were ready to move forward, and another automotive contract played a decisive part. This was the contract we entered into with General Motors in February of this year providing for molten metal to be supplied to a new General Motors foundry to be built on the St. Lawrence River in upstate New York.

The New York Power Authority is engaged in a project for development of hydroelectric power on the St. Lawrence River. The Power Authority needed an assured outlet for a large quantity of the power. This afforded to us an opportunity to get hydroelectric power at rates which would make feasible the operation of another aluminum reduction plant.

We were able to work out a contract with the authority for power for a new 200-million-pound reduction plant on the St. Lawrence. Considerable opposition to the power contract developed in the State of New York, based upon the charge that not enough employment opportunities would result from use of the power to justify assigning such a substantial quantity to the production of aluminum.

This problem was met by the decision of General Motors to construct a foundry at the site of the reduction plant. Governor Harriman's statement at the ground-breaking ceremony for the new St. Lawrence reduction plant shows the part played by the General Motors contract in this expansion. Governor Harriman said:

> Before I agreed to the allocation of power to the Reynolds Co., I felt it was essential to arrange that fabricating facilities be established concurrently, so as to keep the aluminum here for conversion and secure the jobs that go with it.

There is no doubt that without the General Motors contract the power contract would not have been approved. The contract provides for sale of a maximum of 75 million pounds of aluminum a year. The contract will run until May 31, 1964, subject to renewal at General Motors' option for an additional 5 years, and thereafter until terminated by either party on 1 year's notice.

ALUMINUM AND THE AUTOMOTIVE INDUSTRY

It is not accidental that the automobile industry has had such a prominent part in the aluminum developments. That industry was once the biggest user of aluminum. Such cars as the Peerless, Dusenberg, and Franklin of 1902 and 1903 used substantial amounts of aluminum, and aluminum consumption in automobiles increased steadily in the 1920's. One Pierce-Arrow model, introduced in 1923, contained 85 percent of its weight in aluminum.

As the automobile industry advanced from low-volume production of luxury cars into mass production, use of then relatively high-priced aluminum sharply decreased. At about the same time, the steel industry, working with the automobile makers, developed a continuously annealed deep-drawing sheet that speeded production and greatly lowered costs. The aluminum industry was not sufficiently developed in size or in technique to be able to compete with steel in this mass-production market.

Since that time, however, there have been major developments in the aluminum field. Originally, the automobile makers bought aluminum for its lightness and strength, for its freedom from rust and resistance to corrosion, and for its high thermal conductivity. Even as early as 1946, there were additional advantages, including new war-developed alloys and new and more economical fabricating and finishing processes. The molten aluminum pioneered as a commodity by Reynolds possessed special characteristics making it particularly adaptable to the automobile field. Automobile manufacture is geared to a production-line system. Molten aluminum by its nature is a commodity which is produced continuously on a 24-hour-day basis, 365 days a year, and is used soon after it is produced.

The contracts for sale of molten aluminum therefore provide for delivery on a continuous 24-hour-a-day basis and for the motor company to construct facilities adjacent to a reduction plant in order that the metal may be accepted and used continuously in molten form as it is produced. This has the important advantage of relieving the producer of the concern about building up a large inventory of metal.

In a product as complex as the automobile, one new use for aluminum begets others. The highly competitive nature of the automobile business means also that a successful application of aluminum by one manufacturer is quickly adopted by the others. With alu-

minum still accounting for less than 2 percent of a car's total weight, we feel that the molten-metal contracts will accelerate the use of more aluminum parts in automobiles.

While we believe molten metal is encouraging wider use of aluminum, it is not the source of all parts made from aluminum. In the manufacture of 1958 model cars, the automotive industry is expected to use 8 percent more aluminum castings than it did last year and more sheet, extrusions, and wrought products. Molten metal accounts for a relatively small share of the aluminum used to make automotive castings and is not used at all in the fabrication of these other aluminum products. Most of these items are purchased from aluminum fabricators.

The move of the automotive companies toward more extensive use of aluminum and the decisions of Ford and General Motors to make long-range commitments for molten aluminum came at a most propitious time. The experimentation by General Motors in the handling of molten metal paved the way for the later arrangements. The contract with Ford in 1955 was made at a time when shortage of aluminum was being felt severely by all the industry. It and the contract with General Motors together are largely responsible for an expansion of annual capacity of 425 million pounds. More than two-thirds of this—at least 286 million pounds a year—will be available for uses other than to fulfill the commitments to the motor companies.

The significance of these developments will become more apparent when we discuss future markets in greater detail.

FUTURE MARKETS

Your committee's July 1956 report stated:

> Prospects appear bright for a continued expansion of aluminum markets in which nonintegrated users could obtain a relatively greater share. The present expansion plans of the established primary producers contemplate investing hundreds of millions of dollars provided by banks, insurance companies, and public subscriptions in the conviction that the markets will pay off the investment. * * * Despite the inevitable fluctuations likely to occur from year to year, the opportunities for relative growth seem to invite nearly all classes of independents (pp. 40–41).

We know of no reason to change that statement. We expect a greater and greater expansion of the markets for aluminum in which all of the industry will share.

I have previously said that these markets will provide an estimated 3,400,000-ton potential in 1960 and a 5-million-ton potential in 1965.

These future estimates are based on the continued development of today's major markets, rather than on the discovery of entirely new areas of consumption. Accordingly, the major markets of the future bear the same general labels as they do today: Transportation; construction; consumer durables; electrical and communications; machinery and equipment; and containers and packaging.

These are the principal big tonnage markets which the aluminum industry intends to develop further.

Before these potential markets can become a reality, prospective consumers need to be assured that they will not engineer themselves into a shortage by turning to aluminum. As this committee knows

so well, this is particularly important in the aluminum industry which has had recurrent shortages until last year.

The supply picture is a very different one today from the time of your committee's last hearings, in 1955. Small, medium, and big business can get all the aluminum they need. The reason is not to be found in any sudden drop in consumption, but rather in the steady and substantial increase in supply. Total aluminum supply in this country has increased from 1,200,000 tons in 1950 to 2,335,000 tons this year, a jump of 95 percent.

The total supply will increase considerably during the next 3 years as new capacity now under construction comes into full production. The outlook, therefore, is for an adequate supply to meet all the requirements of the growing aluminum market, as it is projected for the next few years.

THE MARKET CHALLENGE

With this supply the industry has a challenging task during the years ahead. The pattern of growth has been development of new markets and advancements within the markets. This will continue. Each of these major markets will have individual attention, special research, and product development. They will involve technological problems ranging from basic metallurgical questions at the primary aluminum level to fabricating techniques and new or better finishes. The aluminum industry will not stop even there. It will take these improved products, methods and finishes, and sell them—sell them to fabricators and manufacturers, and sell them to ultimate consumers.

Our estimates of future markets indicate realistic sales opportunities. There will be intense competition with other products from other industries. This interindustry competition already is great. It is the competition of steel versus copper versus aluminum versus plastics versus glass versus wood. It is the competition for the same consumer dollar among cars, appliances, homes, vacation trips, and a host of other things.

Recognizing these circumstances, the aluminum industry is focusing more of its selling efforts on the ultimate consumer. From the prime producer to the manufacturer of the finished aluminum product, the industry's selling is being consolidated to develop larger markets. The primary producers in the aluminum industry, for example, are using more television advertising than all other metal producers combined, using it principally to sell consumer products—those of their customers as well as their own.

The future market potential of the aluminum industry can best be achieved, in our judgment, if each segment of our industry continues to participate in this competitive struggle against other industries for these markets. Our task is to increase the amount of aluminum used per car, per home, per appliance, per package.

The big job facing each of us in the industry is to offer our customers better and more useful products than other industries do and convince our customers that they should use these aluminum products rather than those made of other materials.

Under these circumstances, our marketing activities are concentrated on the development of new markets, whether in construction, transportation, or in such fields as the petro-chemical industry. In each

case success by one company creates a market not only for that company but also for competing suppliers of these aluminum products. This is an inevitable result of market development, because in each instance we are selling aluminum both as against each other and as against some other material. When we succeed, we not only have sold the customer on our own aluminum product but also have made him much more receptive than before to our competitor's aluminum products. Consequently, whether it is foil labels, oil cans, molten metal, or building panels which an aluminum company is selling to develop a larger market, it is necessarily creating more sales opportunities for aluminum in general.

There is a market development job for every aluminum company, big, medium-sized and small, in this fight to attain a 3,400,000-ton-market by 1960 and a 5-million-ton market by 1965. There is a definite place for every size company in this development.

To do this job, all of us in the industry must of course be ready to make the commitments and take the risks, according to our respective abilities and judgment, involved in so ambitious an effort to build up our markets. Our company has indicated that it is willing to do this by the large financial commitments it has made to develop an adequate supply of aluminum. The product and market development and promotion campaigns of Reynolds and other companies demonstrate their determination to build up the industry's potential markets to their projected levels.

There is also needed in this effort to expand the industry a thorough understanding, within the industry and without. There must be for each company the freedom to grow, to embark on new ventures, to develop new techniques and new products. The aluminum industry has grown because there has been this freedom; this freedom for primary producers to increase in number from 1 to 6 and for the number of extruders, foundries, foil rollers, sheet rollers and secondary smelters—to grow from a handful to hundreds. We need to understand that this growth brings industrywide benefits, and therefore should be encouraged by everyone concerned, including the Government.

We are confident that through this understanding and the efforts of all of the companies the aluminum industry and all segments of it will continue to grow and to prosper.

(The 2 charts referred to in Mr. McConnell's statement are as follows:)

Chart Number 1

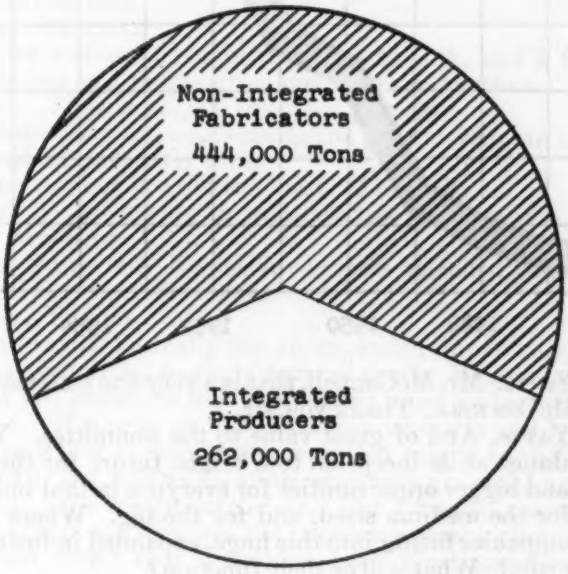
FABRICATED ALUMINUM* SHIPMENTS, 1950-57

Comparison of Non-Integrated Fabricators
and
Integrated Producers

SHIPMENTS (Tons)

	Non-Integrated Fabricators	Integrated Producers
1950	363,500	709,000
1957	807,500	971,000
Increase		
Tons	444,000	262,000
Percent	122%	37%

1950-57 INCREASE



* Sheet, Foil, Extrusions, Wire, Cable, Castings.

Chart Number 2

Mr. YATES. Mr. McConnell, that is a very fine statement.

Mr. MCCONNELL. Thank you, sir.

Mr. YATES. And of great value to the committee. Your statement refers almost at its inception to a bright future for the aluminum industry and bigger opportunities for everyone in that industry—for the small, for the medium sized, and for the big. Where do you see the small companies fitting into this huge, expanded industry? What will be their role? What will be their function?

Mr. MCCONNELL. I would assume, Mr. Chairman, if I may say so, that on the basis of the historical record which we have, that the small- and medium-sized segments of our industry would grow somewhat in the same manner that they have heretofore.

Mr. YATES. You see them as occupying a place solely as fabricators? You do not see any of them moving into the pig and ingot production phase?

Mr. MCCONNELL. I see no reason why we should accept the fact that that is not possible. I just don't know that.

Mr. YATES. Their historical function at least has been to supply fabricated and semifabricated forms; has it not?

Mr. MCCONNELL. Yes. Of course, we were fabricators at one time and that is the reason I say I would not assume——

Mr. YATES. That raises a very interesting point. Mr. Richard Reynolds in his testimony before us pointed that out. He said:

> Our plans are to increase our fabricating capacity and our ingot capacity. We are fabricators, we are merchants, and we intend to continue to go along in every way that we can.

I assume that is still true; is it not? Are you primarily a fabricating company?

Mr. MCCONNELL. Well, I do not know whether you can say primary or not.

Mr. YATES. Are you now moving more into the ingot- and pig-producing class?

Mr. MCCONNELL. As you can see by that chart, my friend, Mr. Richard Reynolds, I am sure, was stating what the original intention of our company was, and no doubt still is; but because we were able to get into the primary production and increase our primary capacity, I could see by this chart that we have also, during the years, become a much larger seller of primary than we were before.

Mr. YATES. I must confess that I have difficulty transposing tons into pounds and pounds into tons.

Mr. MCCONNELL. I do, too.

Mr. YATES. Your statement makes reference to both, and I found it somewhat confusing as I moved from one figure to another.

Mr. MCCONNELL. That is 120,000 tons that you see.

Mr. YATES. I hope there are mathematicians present who can translate that into pounds at some later time.

Mr. MCCONNELL. Irving, you did the chart. You do it.

Mr. LIPKOWITZ. We are trying to translate the industry into tons. That is one of our problems.

Mr. YATES. Oh, is that so? Recently, you have amended your contracts with General Services Administration?

Mr. MCCONNELL. Yes, sir.

Mr. YATES. To provide basically for an expanded opportunity for the distribution of your metal to nonintegrated users. What is a nonintegrated user as you recognize that term under those contracts?

Mr. MCCONNELL. Of course, we have got those contracts and I don't want to have to interpret them in some way that might be different from what they really say, and we all know what they are and I assume they have been put in the record heretofore. But I assume a nonintegrated user in general is one who does not produce primary aluminum.

Mr. YATES. Then under that definition, both Ford and General Motors would be nonintegrated users?

Mr. MCCONNELL. I should tell you this, in case you do not know it. Under the original General Motors contract which we entered into in 1950, that problem did come up as I recall, at least it was in the

ordinary routine. We were required under that contract where the amount of metal exceeds a certain amount, as I recall 500,000 pounds, we are required to notify General Services Administration of that particular customer to reach——

Mr. YATES. Did you mean pounds then?

Mr. MCCONNELL. Five hundred thousand pounds, I beg your pardon.

Mr. YATES. Per month?

Mr. MCCONNELL. And we notified them of our contract with General Motors, at Jones Mills, and our classification of General Motors in that particular instance as a nonintegrated user, I believe, was accepted by the General Services Administration at that time.

Mr. YATES. The agreement as it now exists is to provide, I think, 35 percent?

Mr. MCCONNELL. That is correct.

Mr. YATES. Of your capacity for the use of nonintegrated users?

Mr. MCCONNELL. That is right.

Mr. YATES. Under your contracts with Ford and General Motors, will you not have attained this objective of distributing 35 percent merely by making deliveries to those companies under their contracts?

Mr. MCCONNELL. I have not figured it out exactly. In theory, that might be so, but as you know, we are interested right now in developing more markets for aluminum, and as of now that is——

Mr. YATES. Insofar as your contractual obligation is concerned with GSA to make available——

Mr. MCCONNELL. Of course, the GSA facilities——

Mr. YATES. Let me finish my question, please. To make available 35 percent of your capacity for nonintegrated users, the fulfillment of your contracts with General Motors and Ford will attain that objective, will it not, not only on a theoretical basis but on an actual factual basis, too?

Mr. MCCONNELL. I don't want to say "Yes" or "No" for this reason: The General Motors and the Ford contracts, the new ones, not the old ones—the General Motors and the Ford contracts made it possible for us to have 425 million pounds capacity that we otherwise would not have had, and that was on the basis of the commitment of these 2 companies, and outside commitments of these 2 companies of approximately one-third of that new capacity.

When you relate that fact to the fact that the one-third that we are talking about or the 35 percent we are talking about are the facilities which were created at the time of the Korean expansion, and then you go on to the present time when the 425 million pounds is brandnew, I do not quite think that you can—while mathematically what you say, I do not want to disagree with you, I do not think, in fact, in logic, that you can reach that conclusion, because the new capacity of two-thirds of the 425 million pounds is all by reason of these new contracts.

Mr. YATES. Your present argument may be substantiated by your testimony on page 11 where you point out that your contracts with General Motors and Ford have established a fourth primary aluminum product. The contracts which you have with GSA provided for furnishing 35 percent, as amended—35 percent of your capacity in pig form?

Mr. MCCONNELL. Yes.

Mr. YATES. Now, in view of the fact that you now have established a fourth primary aluminum product, does this mean that this does not qualify as pig under the basic contract?

Mr. MCCONNELL. Well, I would like to meditate on that a little bit more, if I may. I understand your point.

Mr. YATES. I am trying to find out whether or not those——

Mr. MCCONNELL. I had not considered that. It is an interesting legal point, Congressman Yates. I had not considered that myself. I would like to think about that a little bit more, if I may.

Mr. YATES. What is the consideration for the amendments to the contract? I wondered what the Government was giving Reynolds for Reynolds' expanded facilities?

Mr. MCCONNELL. That is a good question because I had spoken at length several times on that, not to you, sir.

Mr. YATES. Yes.

Mr. MCCONNELL. But I always maintained that there was not.

Mr. YATES. That struck me as I read the amendments. I can understand the possibility of there being consideration for the contracts of the other two primary producers. When I refer to the other two, I mean in the context of the Big Three.

Mr. MCCONNELL. Yes. We did it, though, we agreed to do it.

Mr. YATES. I do not think you will have any great difficulty in meeting that objective under certain definitions of the term "nonintegrated user."

Mr. MCCONNELL. I do not think we will have any difficulty meeting it on any basis.

Mr. YATES. I just wondered whether or not in case it came up in the future, a significant legal argument could not be made on the ground there was no consideration for it. But you know of none at the moment?

Mr. MCCONNELL. No, sir.

Mr. YATES. You are general counsel and you do not know of any consideration that has been given for it at the moment?

Mr. MCCONNELL. I made that argument, but Reynolds does not intend to stand on any such legal technicality as that, as I am sure you are aware.

Mr. YATES. The changes in the contract were conditionally accepted by Reynolds, conditional upon obtaining the consent of the bankers. You were given 60 days within which to get their approval. The 60 days have now expired.

Mr. MCCONNELL. Yes.

Mr. YATES. That approval has been obtained?

Mr. MCCONNELL. Yes, sir.

Mr. YATES. Have there been any other amendments? We have copies of your contract with General Motors and Ford, which we obtained from the Securities and Exchange Commission. Have there been any amendments to those contracts other than those which are contained in your proceedings for the issuance of securities?

Mr. MCCONNELL. No, sir. Those contracts contained whatever amendments——

Mr. YATES. May I show you the copies that we have and get your statement as to whether those are true and exact copies of your contracts and whether those are the only ones that exist?

Mr. MCCONNELL. Could we—I am sure they are all right.

Mr. YATES. You can verify them later.

Mr. MCCONNELL. We can do that later. I would appreciate it, sir.

Mr. YATES. We can put your testimony in the record at a later time on that point.

Mr. MULTER. Mr. Chairman, after they have been identified, they will be made a part of our record?

Mr. YATES. Yes.

Mr. MULTER. May the record show that although the copies are marked confidential, they are no longer confidential and have been released to the public?

Mr. YATES. The copies that I had were not marked confidential. Some parts are, but as I understand it, the Securities and Exchange Commission decided that they were not to be confidential and made them available for the public. That was our understanding.

Mr. MCCONNELL. We have not indicated any desire on our part to have them other than confidential. Whatever the SEC has said, they have said.

Mr. YATES. This was the ruling by the SEC.

Mr. MCCONNELL. Yes, that is right.

Mr. MULTER. The point I would like to have this record show, if we make them part of our record, is that we are not exposing them to the public for the first time. They are now public records, am I not right?

Mr. MCCONNELL. I wish they were confidential.

Mr. MULTER. There is nothing we can do about that any longer. They are now public records, and spreading them on our record does not breach any desire on your part to keep them confidential.

Mr. MCCONNELL. Breach my desire, but not what has occurred.

(The contracts referred to appear in the appendix, pp. 403–435.)

Mr. YATES. Mr. McConnell, does your company ever sell its pig and ingot below published price?

Mr. MCCONNELL. I would hope we did not on very many occasions. I am not acquainted with any occasion when we did.

Mr. YATES. The reason that I asked that question is that I have heard recently that pig and ingot were being sold by the producers at below the published price, that it was available at below the published price.

Mr. MCCONNELL. I am not aware——

Mr. YATES. The reason I ask the question is that it seems to me to be rather unfair that the Government pay a published price if, in fact, the metal is being sold at below the published price.

Mr. MCCONNELL. I am not aware that they are, that we are doing that. I would be surprised if we were.

Mr. YATES. Under the definitions that are contained in the contract, there are several prices that are mentioned. One is a so-called published price.

Mr. MCCONNELL. Yes.

Mr. YATES. And the Government is supposed to pay this.

Mr. MCCONNELL. That is right.

Mr. YATES. Your contracts with General Motors and Ford, you have definitions other than published price. You have a so-called market price.

Mr. MCCONNELL. Yes.

Mr. YATES. What is the difference between a published price and market price?

Mr. MCCONNELL. I think at least at this time they coincide; do they not?

Mr. YATES. I do not know.

Mr. MCCONNELL. I think they coincide.

Mr. YATES. I would like to find out.

Mr. MCCONNELL. I think they may be different expressions used by different lawyers, but generally speaking, they are identical.

Mr. YATES. You have them in your contracts with Ford and General Motors, in contrast to your contracts with the Government. The Government contracts refer merely to published price. The contracts with Ford and General Motors refer to market price, and there are other references to prices other than published price.

Mr. MCCONNELL. That is right.

Mr. YATES. I wonder what the contracting parties had in mind in terms of a price other than a published price? Is there any time when your price is lower than the published price or higher than the published price? What is meant by the phrase "market price"?

Mr. MCCONNELL. Well, I think as of now at least insofar as the past record is concerned, I know of no instance in which the market price and the published price are not the same.

Mr. YATES. Is there ever a variance between the published prices of the three companies?

Mr. MCCONNELL. Well, yes; on occasion when we have price moves there is a variance for a period of time; yes.

Mr. YATES. And is the market price—they also refer to a weighted average, a weighted market price.

Is this supposed to be the market——

Mr. MCCONNELL. Which contract refers to the weighted average?

Mr. YATES. The GSA contract refers to a weighted published price.

Mr. MCCONNELL. Give me the contract, and let me see it.

Mr. YATES. I wondered what is meant by that definition.

Mr. MCCONNELL. Let me just read it again, if I may.

Mr. YATES. Article 11.

Mr. MCCONNELL. That is just in the event that they were selling, or from the published price.

Mr. YATES. From the published price?

Mr. MCCONNELL. Yes.

Mr. YATES. In the event that sales are being made at a price lower than the published price by any of the companies, does that mean that the Government is then entitled to that price in connection with any puts that the companies make to the Government?

Mr. MCCONNELL. I am not sure I agree with that. In the first place I am not acquainted with the facts which you seem to indicate a possibility that there is such selling.

Mr. YATES. I don't know that it is a fact, either.

I have been told by people whom I have found to be responsible in the past, who know the industry, that metal is available at less than the published price, because of its superabundance.

Now the companies are putting to the Government.

Mr. MCCONNELL. That is correct.

Mr. YATES. They are putting to the Government at the published price?

Mr. McConnell. Right.

Mr. Yates. If the metal is available to purchasers other than the Government at less than the published price, should not the Government be given the benefit of that lower price?

Mr. McConnell. Whatever the contract says should happen. I would rather not try to interpret it here, if I may.

Mr. Yates. Let's not look at it legally. Let's look at it on the basis of just fairness.

The Government has been your biggest customer. Presumably they are entitled to as good treatment as anybody else.

Mr. McConnell. I think that was the effort made here by this contract, but I would rather let the contract speak for itself if I may, sir.

Mr. Riehlman. Mr. Chairman, there are two different groups of people writing these contracts. One is the General Services Administration, which is the Government, and the other, industry; am I correct in that?

Would there be any reason for using a different terminology in the 2 different contracts, 1 with the Government and 1 with industry?

Mr. McConnell. Well, Congressman Riehlman, you know every time you get with a different set of lawyers all of them trying to do something a little bit differently—I think, for example, the wording in the General Motors contract and the Ford contract as to price is somewhat different, but it is certainly the intention of the Reynolds Metals Co. that the prices be identical.

Mr. Riehlman. Would they normally in drawing a contract refer to the market price in procurement?

Mr. McConnell. Why?

Mr. Riehlman. To the words "using market price."

Mr. McConnell. Who would do that, which one?

Mr. Riehlman. General Motors or business and industry.

Mr. McConnell. Yes; I think they would.

Mr. Riehlman. Would it be more familiar in writing contracts or would it be the procedure that would be followed by the Federal Government to use the term "the market price," to which reference was made here previously?

Mr. McConnell. I am not sure that I understand the question. I am sorry.

Mr. Riehlman. Maybe I have confused it. We have two terms used in the contract: One is the "published price" and the other the "market price." That is what I wanted to say.

Mr. McConnell. I think all are in effort to define the "market price."

Mr. Riehlman. One uses the published price and the other use the market price?

Mr. McConnell. Right.

Mr. Riehlman. Then I think that is the thing we are interested in learning—why you are using the published price in one contract, and the market price in the other contract.

Mr. McConnell. I don't think there is any reason except that three different sets of lawyers worked on the contracts, myself.

Mr. Yates. There are two different factual situations that I think Mr. Riehlman as a new member of the committee may not be aware of, and they are that the contracts with the Government use the term "published price" and also the term "market price."

Mr. RIEHLMAN. In their contracts?

Mr. YATES. That is right—both.

The contracts between Reynolds, GM, and Ford refer to published price and from that published price they establish a price for the molten metal.

Mr. RIEHLMAN. I see.

Mr. YATES. Now in terms of the contracts with General Services Administration, the Government pays the companies on the basis of published price.

Who establishes the published price?

The companies do; don't they?

Mr. MCCONNELL. Yes. Of course, I would like to say also that when you talk about the terms of the contract, molten metals contracts were entered into between Reynolds Metals and the motor companies, and the Government contracts were entered into between GSA and all 3 of the producers, so all 3 of the producers participated in whatever wording was included in the contract.

Mr. YATES. That is correct. But the company sets the published price itself; does it not?

Mr. MCCONNELL. That is a complicated thing. I think that we would say, Mr. Chairman, if I may say this, that the issuance of the price information certainly comes from the companies, as it should, but as to who sets the price ultimately, I am not so sure that I would say.

I suppose it depends on developments of all kinds.

Mr. YATES. The reason I asked the question is that the contracts themselves say the Government shall pay the published price.

Mr. MCCONNELL. Yes, but when you get into why the price is what it is, there are an awful lot of factors, as you well know, which are involved in arriving at the price, which are not within the control of the companies.

The companies announce the price, but I won't say the companies fix the price.

Mr. YATES. Then who sets the published price?

What are the factors that go into the published price?

Mr. MCCONNELL. Well, every kind of factor, costs, competition, not only within the industry, but without.

Every kind of factor normally in American business that we have in connection with our pricing problem.

Mr. YATES. I was under the impression that a published price was a price that was not established in terms of competition, that it was a price that was published.

The company stated that this is the price for our product, and then the American Metal Market or the Engineering News then stated "This is the published price."

Am I wrong in that interpretation?

Mr. MCCONNELL. I think you are correct in the procedure which you outline, but if I may presume to say so, I do not think that any company in American business has the power to just establish prices at its whim without regard to all the things which go into the pricing problem.

Mr. YATES. This is another thing. We are discussing published price. Insofar as published price is concerned, isn't that the price that is set by the company?

We are not talking about market price at the moment. We are talking about published price. You, I think, may have been discussing market price, which is a combination of many factors.

Mr. McConnell. Yes. I rather think that the published price is a combination of many factors too. I do not mean to say that the companies don't announce it themselves.

Certainly they do.

Mr. Yates. Well then perhaps I have been suffering from a misapprehension, but I repeat, I was under the impression that when the companies announced their prices for the primary metal, they are then published in the American Metal Market and in the Engineering News, and that this is then the basis upon which the Government pays the companies for any of the metal which it receives under the contracts.

Am I wrong in that?

Mr. McConnell. No, I don't think you are in error as to the procedure.

Mr. Yates. Right.

Mr. McConnell. I just want to say again I don't think that the companies can do that by some——

Mr. Yates. All right.

Then the company 2 years ago when we had our hearings fixed the price at 19 cents for its primary product?

Mr. McConnell. No, I have had a chance to read your statement there, and I don't want to disagree with it without looking it up but I think the price at that time was 22½ cents.

Mr. Yates. No. I think that was 22½ cents for scrap. I remember the price of scrap. I am relying on my memory but I seem to remember it was 19 cents 2 years ago.

Mr. McConnell. I think not. I think it was 22½ cents.

Mr. Yates. If I am in error, I stand corrected.

Mr. McConnell. That is not the point.

Mr. Yates. But that was the published price established by the companies at that time?

Mr. McConnell. That was the published price announced.

Mr. Yates. And the published price today is 26 cents?

Mr. McConnell. 26 cents.

Mr. Yates. What protection does the Government have under these contracts with you? What protection does the Government have against exorbitant price increases?

If you can establish the published price at a certain level, why can't you establish it at 30 cents or 32 cents, and the Government would have to pay it?

Mr. McConnell. Well, the reason we cannot do that, I think the reason that prevails in all governmental contracts where they buy at a commodity price, and that is that we assume, the Government assumes, when they make these contracts, that all of the elements which go into the making of a price by American industry will hold the prices within the reasonable limits of what the market should be.

Mr. Yates. So the only real protection the Government has against an exhorbitant price, then, is the fact that when you tell the Government "This is our price," you will adhere to that price, in terms of your sales to other segments of our economy.

Presumably the Government is entitled to the same type of treatment that other customers are.

Mr. McConnell. That other buyers of pig aluminum are, yes, I have no disagreement with that.

Mr. Yates. Has Reynolds cut back in its production in its expanded facilities that are the subject of its contracts with the Government?

Mr. McConnell. I would have to ask——

Mr. Lipkowitz. No.

Mr. McConnell. Nor have we cut back on our expansion program, as you know.

We have proceeded to build our plant at Listerhill for 225 million-pound capacity, and we are proceeding to go ahead with construction of our plant at Massena, N. Y., for another 200 million-pound capacity there.

Mr. Yates. I take it, then, that Reynolds is operating at full capacity.

Mr. McConnell. Yes, we haven't cut back anything.

Sometimes we have power shortages that force us to reduce our production, but, generally speaking, our plants go forward at full production.

Mr. Yates. Are there some figures you can use for example? United States Steel is operating at 80 percent.

Are there any figures that you can give us?

Mr. McConnell. I don't believe that we have such figures. Mr. Lipkowitz says we operate at 100 percent.

Mr. Yates. Has there been any attempt to minimize the Government's liability at any time?

Mr. McConnell. I think that by the terms of the contract—leave that out—we feel a deep obligation to sell as much of the aluminum as we can besides the Government, and I will think that you will find that we have made every effort in that regard.

I think that obligation is imposed on us, and we try to meet it every way we can.

As you know, it is only in the last 6 months or so, although we have had our put rights for the last 3½ years—it is only in the last 6 months or so that we have put any metal to the Government. I think that is, too, because of the great pressures that we have made in our marketing efforts.

Mr. Yates. Kaiser and Alcoa, which had contracts with Aluminium for the importation of aluminum, recently had their GSA contracts amended to delete that amount of aluminum from the contracts; so that it was taken out of the consideration in determining the Government's liability for accepting their puts under the contracts.

Does not the use of scrap by a primary producer fall in that same type of category?

Mr. McConnell. Well, I don't want to comment on what Alcoa and Kaiser have done. I just want to tell you about scrap now.

Mr. Yates. I know Reynolds had no imports.

Mr. McConnell. I know those fine people handle things the way they should, and I just want to talk about scrap.

Mr. Yates. That is what my question was aimed at, the question of scrap.

Mr. McConnell. We believe that we have the right to continue to purchase scrap as we have historically, and we have found that that was the basis of our commitment, at a minimum, I would say.

Now, as a matter of fact, we have bought much less scrap percentagewise and totalwise, in many instances, than we did before we entered into the Government contract.

Would it be interesting to you to hear what the figures are on that?

Mr. Yates. Yes.

Mr. McConnell. Well, let's see.

Government contracts for 1951: In 1951, our primary production was 487 million pounds; our scrap purchase was 21 million pounds, for a total of 4.4 percent of our total production.

In 1952, our primary production was 553 million pounds, scrap was 22½ million pounds.

In 1953, our primary production was 665 million pounds; scrap 43 million pounds; 6½ percent.

I won't read all of them, but in 1956 our primary production was 853 million pounds, our scrap purchases were only 26 million pounds, and the percentage had gone down to 3.1 percent.

The percentage had gone down, obviously, because our production had gone up—our primary production had gone up—but also the total amount of metal had in many instances gone down from before.

As a matter of fact, in 1946 we bought 38 percent of scrap.

Mr. Yates. Mr. Dalmas has a chart showing what the price was. At that time the price was 21½ cents, and I stand corrected.

Mr. McConnell. We thought it was 22½ cents.

Mr. Yates. All right; we will split the difference. That is a good basis for compromise.

Your figures are interesting ones, but the thought occurs to me, in connection with your argument, that this was your historical pattern—wasn't it the historical pattern for Alcoa and Kaiser to import from Canada when they entered into their contracts with the Government?

Mr. McConnell. I am going to let them argue their own, which I am sure they will do very ably.

Mr. Yates. Is it more profitable to sell primary aluminum or fabricated products?

Mr. McConnell. I think generally speaking we have felt and have so stated, as I recall, in the hearings, that there is more profit in fabrication than there is in the sales of primary.

Mr. Yates. That was true when you last testified, when the price was 21½ cents per pound.

Is that same conclusion true today when the price has gone up?

Mr. McConnell. Yes; it is.

Mr. Yates. What was the basis for the price increases—increased costs?

Mr. McConnell. As you know, we have in our industry these so-called automatic wage increases, which occurred—our last one—about, as I remember, in July or August.

That was the occasion for our price increase, plus other increased costs which we had incurred throughout the year. They were very substantial ones.

Mr. Yates. This increase in primary cost is 4½ cents per pound.

Mr. McConnell. I was thinking about——

Mr. YATES. Now your price increases, or, rather, your prices have gone up from 21½ cents in 2 years to 26 cents.

Mr. MCCONNELL. I had the 22 in there.

Well, of course, as you remember, while we may have gone up, we haven't gone up like some other folks that we could refer you to. But I think primarily our prices have gone up, as have those of other companies in American industry, because of increased costs.

Mr. YATES. Has the percentage of your increase been the same for your fabricated products as it has in connection with the sale of primary?

Mr. MCCONNELL. Saleswise, percentagewise, or what?

Mr. YATES. Percentagewise.

Mr. MCCONNELL. I don't think it is exactly the same across the board. But there is no general pattern for it.

Mr. LIPKOWITZ. No general pattern.

Mr. YATES. Is there no comparison that can be made with your semifabricated forms as to what the price was then and what the price is today?

Mr. MCCONNELL. I think Mr. Lipkowitz could answer that.

Mr. LIPKOWITZ. When we made our price increase, for example, our last one of last August, we increased our fabricating prices about the same percentage that we did our base price, our primary price.

However, the market conditions vary from product to product—vary in each product—so they have to be adjusted according to market conditions in each case.

Mr. YATES. I wondered, Mr. Lipkowitz, as to whether or not the percentage of increase on comparable forms that you were selling during our hearings in 1955 have gone up the same percentage of increase as primary metal?

Mr. LIPKOWITZ. Well, we are in a very competitive market, and we have to check each day to know exactly where they stand in some cases.

Mr. YATES. You and I both recognize that you haven't answered my question.

Mr. LIPKOWITZ. Well, I am saying that in August 1956 when we increased our base price 1 cent, we increased our fabricated price on a proportionate basis.

What I am saying is that today those prices, depending on the individual product—we would have to go down the price list and see where they stand today.

Mr. YATES. Have I given you an unfair basis for comparison in using as a standard the basis between our last hearings and the present hearings, where you have had this increase in primary metal?

Mr. LIPKOWITZ. I would say, during that period, every price increase was on a pro rata basis for both primary and semifabricated.

Mr. YATES. When you say that, you mean the percent of increase was comparable on semifabricated products to the increase in the price of primary metal?

Mr. LIPKOWITZ. That is right. There are hundreds of products, and every one isn't exactly mathematically alike, but generally speaking, that is true.

Mr. YATES. In your new amendment with GSA, the Government pays at time of production rather than delivery. Is this of a significant advantage to the Government?

Mr. McConnell. That is the price production which we gave the Government in this particular situation.

Mr. Yates. Does the price ever go down?

Mr. McConnell. I don't know. I guess it has——

Mr. Yates. Has the price ever gone down?

Mr. Lipkowitz. It went down very sharply between 1930 and 1942. It went from 20 cents to 14 cents.

Mr. Yates. And since then, there has been an increase.

Mr. Lipkowitz. As costs have gone up—as a matter of fact, the price hasn't gone up anywhere near as much as costs since then.

Mr. Yates. So it may be of benefit to the Government to have payment on production date rather than delivery date?

Mr. McConnell. That is right. That was the purpose of that amendment.

Mr. Yates. Is there any reason why this shouldn't be given to your other customers?

Mr. McConnell. Well, we have enough trouble with the——

Mr. Yates. I am thinking of small businesses, for example.

Mr. McConnell. Well, it is a different kind of a situation, I believe.

Mr. Yates. Does Reynolds itself draw any distinction between its nonintegrated users in terms of size? I think most members of the committee feel that General Motors and Ford cannot really be classified as small business.

Speaking for myself at least, I would like to believe that Reynolds has some idea of protecting the smaller fabricator in the aluminum field. I think you have stated that in your statement.

Mr. McConnell. Yes.

Mr. Yates. What do you do to protect these smaller companies? Do you make a deliberate effort to do that, or to make metal available to them?

Mr. McConnell. What we are doing now and what we have done in the history of our industry is to work as hard as we can in developing every possible market, both large and small. I think that in our company, and I am sure this is true of the other companies, we try to develop every possible market, no matter what size, for a variety of reasons. First of all, we have to sell the metal, and secondly, we never do know who is going to develop into a very large customer sooner or later. We have had a very substantial growth, not only in number, but in size, in those who buy from us. So I think generally, our sales department is working as hard as they can to sell all they can to whoever will buy it.

Mr. Yates. What is Reynolds' total capacity at the present time?

Mr. McConnell. Approximately 1 billion——

Mr. Lipkowitz. 488,000 tons.

Mr. McConnell. Approximately 1 billion pounds.

Mr. Yates. What portion of that does Reynolds reserve for its own fabrication facilities?

Mr. McConnell. Do we have that over here?

Mr. Lipkowitz. Here is a copy of those figures.

Mr. McConnell. I can give you this since 1946, if you would like to have it.

Mr. Yates. Yes, I think it would be helpful.

Mr. McConnell. In 1946, our primary aluminum sales to nonintegrated users were only 4,500 tons. We used in our own fabrica-

tion 195,000 tons. I won't give you every year. But in 1956, that had changed so that——

Mr. YATES. Would you include 1955, which was the time of our own hearing?

Mr. MCCONNELL. Certainly.

In 1955, our sales to nonintegrated users were 98,000 tons, and the aluminum we used in our own fabrication was 304,000 tons.

In 1956, nonintegrated user sales were 114,000 tons, and we used 318,000 tons.

Mr. RIEHLMAN. 318,000?

Mr. MCCONNELL. Yes. It has been a very substantial increase, from practically none in 1946 to nonintegrated users, to 114,000 tons now. I think that is reflected pretty well by the increase in sales on that chart.

Mr. YATES. When you talk about primary aluminum sales, does that include your molten metal, too?

Mr. MCCONNELL. Well, yes, Mr. Yates, I guess it would include the General Motors sales. None of the bigger contracts, of course, have become effective yet. But the General Motors sales in Jones Mills, is a much smaller contract, which would be included. But the general figures, the increase in aluminum used in our fabrication, is from 1946 to 1956, 63 percent, and the increase in the sale of primary aluminum to nonintegrated users has increased from 1946 to 1956 2,500 percent. Of course, it started out so low that I don't think that is a completely valid figure. Anyway, those are the percentage figures.

I think I say, anyway, that molten metal, as I pointed out to you, is a very small part of any figures that we now have, because we haven't started selling it yet in larger contracts.

Mr. YATES. Now, your contracts with Ford and General Motors have three price factors which I wondered about. You start with a published price in determining your final price to the automobile companies. I am looking at the copy of your contract of November 7, 1955, between Reynolds and Ford.

Mr. MCCONNELL. Yes, sir.

Mr. YATES. And looking at page 7 and the following pages. On page 11, an example is given using hypothetical figures. You start with a list price of 99-plus pig, and I assume the list price is the same as the published price in that instance?

Mr. LIPKOWITZ. Yes, sir.

Mr. YATES. And you deduct a freight factor.

Mr. MCCONELL. Are you looking at the example now?

Mr. YATES. Yes, on page 11. You deduct a freight factor. Then, 10 percent of the published price, minus the freight factor.

Mr. MCCONNELL. Just a minute. You know they took that out of the one on file.

Mr. YATES. Is that contract which I gave you not an exact copy?

Mr. MCCONNELL. Well, we have 2 page 11's, for some reason.

I'm all right now.

Mr. YATES. Off the record.

(Discussion off the record.)

Mr. YATES. Then you multiply by a percentage of aluminum content, then you add a certain other chemical to it, and you finally get a molten metal delivered price?

Mr. McConnell. Yes, sir.

Mr. Yates. Is freight—is an allowance for freight in your ordinary published price? Is that why you took it out of this?

Mr. McConnell. Yes, we sell on an f. o. b. price, freight allowed, to cusomer's destination, on the basis of the transportation that the sellers will have.

Mr. Yates. F. o. b. from your company to the customer's destination?

Mr. McConnell. Freight allowed by transportation of our own facilities.

Mr. Yates. What is the freight factor included in this price?

Mr. McConnell. The average cost of freight in a pound of pig.

Mr. Yates. When you deliver your metal to the Government, does the Government pay freight in addition to the published price?

Mr. McConnell. No; they—oh, no. The Government has an advantage in it because of their utilization of these so-called Government bills of lading. We allow freight to the Government, and the Government gets the advantage because they have a cheaper freight than does anyone else. It results in a lower price to the Government, as a matter of fact.

Mr. Yates. Apparently there is something here I don't quite understand. If your price is f. o. b. from your plant——

Mr. McConnell. Freight allowed, which means that we pay for the freight.

Mr. Yates. That you pay for the freight?

Mr. McConnell. Yes.

Mr. Yates. I see. So this is the freight factor that is referred to, and you don't charge additional freight on the sale of your primary metal to your customers?

Mr. McConnell. Oh, no.

Mr. Yates. I see. And that is deducted from the price at which the molten metal is ultimately sold at?

Mr. McConnell. Since there is no freight, we deduct that.

Mr. Yates. That is right.

Well, then, the Government does pay freight, doesn't it, actually in the published price?

Mr. McConnell. Well, we pay the freight. Then the Government actually gets a lower price, because we allow them freightage in excess of the amount of the freight which they pay, you see. We allow the Government an amount of freight equal to the amount that would be under transportation facilities of our own selection.

Now, the Government has the opportunity, because of its peculiar Government bill of lading situation, to buy freight, if I may use that term, cheaper than we do. But we allow them a price of freight which is in excess of that which they spend.

Mr. Yates. So the Government doesn't actually pay you a published price; does it? Is that what you are saying, that you make a deduction from the published price of the saving that the Government would get in freight, ordinarily?

Mr. McConnell. Well, we allow the Government the cost of the freight, and they don't pay that much for freight, so they get the aluminum at a little lower price than do the ordinary customers.

Mr. Yates. Then they don't pay the published price. They pay less than the published price because of the freight.

Mr. McCONNELL. I won't say that, but the net cost to the Government is somewhat less because of this freight factor.

Mr. MULTER. If the price is 35 cents per pound and freight is 1 cent per pound, when you are making deliveries through the cheapest carrier you can employ, the Government, nevertheless, can take delivery at your plant and select its own carrier and pay possibly three-quarters of a cent per pound for freight. You will allow the 1 cent you would have paid if you had employed the carrier; is that right?

Mr. McCONNELL. That is right.

Mr. YATES. Is this same allowance made for customers other than the Government?

Mr. McCONNELL. No, sir.

Well, we make freight allowed, yes; but no other customer has the advantage that the Government has because the Government doesn't buy in the freight.

Mr. YATES. I am wondering about a small-business man?

Mr. McCONNELL. He gets freight allowed to the point where he wants the metal delivered.

Mr. YATES. Then he doesn't pay anything for the transportation of that metal; is that correct?

Mr. McCONNELL. Well, it is included, of course, in the cost, and, therefore, the price, but he doesn't pay anything in addition for it.

Mr. YATES. But he doesn't pay anything in addition for it?

Mr. McCONNELL. Yes.

Mr. DALMAS. May I ask a question, Mr. Chairman?

Mr. YATES. Yes; certainly.

Mr. DALMAS. Mr. McConnell, your price is f. o. b. shipping point, with freight allowed to destination?

Mr. McCONNELL. Right.

Mr. DALMAS. And you bill the customer f. o. b. shipping point. He pays the freight and deducts the freight from his invoice. Correct?

Mr. McCONNELL. Right.

Mr. YATES. Is the deduction of the freight in your hot-metal contracts attributable to the proximity of the company to your plant?

Mr. McCONNELL. There is no freight at all, as you know, by the terms of the contract, Mr. Chairman.

Mr. YATES. It is deducted?

Mr. McCONNELL. It is deducted, and the molten metal—we deliver it into the receptacle of the automobile company on our plant. There is no freight.

Mr. YATES. There is also a 10 percent—an additional 10-percent deduction. What is that predicated on?

Mr. McCONNELL. That is predicated on the differences, generally speaking, in the cost of the metal.

Mr. YATES. From its molten state to the pig state?

Mr. McCONNELL. That is right; yes, sir.

Mr. YATES. Putting that in another way, does this mean that it costs 10 percent to pig hot metal?

Mr. McCONNELL. Well, there are a whole lot of costs involved in this which I want to tell you about.

If you will permit me, Mr. Chairman, I'll read the items which are involved in it.

Mr. YATES. Certainly. I was just going to say that the committee is very much aware of the fact that you have other commitments, and that you did want to get away at 12 o'clock. At 12 o'clock, the committee will stand adjourned, and we'll hear our next witness at 1:30 p. m. With that understanding, you may proceed.

Mr. MCCONNELL. I thank you.

Mr. YATES. With the understanding that if the committee would like to have you return at another time to finish your testimony, you may come back.

Mr. MCCONNELL. Fine.

Cost factors involved in general—and I am not going to try to get into them in detail for a variety of reasons, which I am sure you will realize—cost factors involved are weight loss in pigging from pouring and oxidation upon hardening of the metal. The actual operations involved in the pigging are movement of molten metal to pigging oven; blending and a certain amount of reheating to permit handling of molds; pouring and removing from molds; handling of pigs; marking, stamping, stacking, and so on.

Inventory costs—we have no inventory. For example, in connection with the Government contracts, that is very substantial. Shipping, carloading, demurrage, traffic department costs, and freight bill expenses. Maintenance and general plant services pertaining to the foregoing items. Sales advertising and general administrative expenses involved in pigging are substantially greater than corresponding expenses for molten metal.

Molten metals produce sales of high silicon and other metals which are more costly to remove. You know about that.

Those are, generally speaking, the items of cost involved. I can be more detailed than that, but I believe that is sufficient.

Mr. YATES. Your testimony today on page 11 of your statement indicates that your hot metal is a fourth primary aluminum product. Could anybody else buy it from you?

Mr. MCCONNELL. Well, we have endeavored, as perhaps you know, or maybe you do not know—we have endeavored to sell it to the other members of the automobile industry. We have tried hard to sell it, and so far, at least, have not been successful.

There are not so many people, of course, that would be in a position to take it up on the same basis that these large users do.

Mr. YATES. Suppose a smelter—an independent smelter—wanted to buy your hot metal.

Mr. MCCONNELL. We have no policy at this time that would say we would or would not sell it to him. It would have to be on the basis of the particular fact of the particular customer at the time.

Mr. YATES. Who owns these plants?

As I understand it, these companies erected these plants on your land.

Mr. MCCONNELL. No, they bought the land from us.

Mr. YATES. They bought the land from you, and they now own the land and the facility?

Mr. MCCONNELL. That is right.

Mr. YATES. I see.

Mr. RIEHLMAN. May I ask a question, Mr. Chairman?

Mr. YATES. Yes, certainly.

Mr. RIEHLMAN. Certainly Reynolds Metals Co. has no policy to prevent its considering a contract with any other type of company, should it be a smelting company, if this other company wanted to procure land next to Reynolds, has it?

Mr. MCCONNELL. We have no policy on that, Congressman Riehlman.

We have endeavored to try to sell it to those whom we thought it would fit best. I don't know whether it would fit other people or not.

Mr. RIEHLMAN. Have you had any inquiry at all from other companies?

Mr. MCCONNELL. None at all, sir. None that I know of at all.

Mr. YATES. There are only two companies that you have this hot-metal contract with, Ford and General Motors?

Mr. MCCONNELL. Yes, sir.

Mr. YATES. What effect will these contracts have upon smelters who previously sold General Motors and Ford?

Are you going to supply the needs of these two companies? Completely? For smelting facilities?

Mr. MCCONNELL. Well, I don't think so, sir.

Sometimes we wish we had all that business, but I don't think we are going to get it. I do not think anything will happen in the whole automobile industry except that all of us will get more business if we do it right and press hard for our sales and give the matter good service.

When I say "all of us," I don't mean just primary producers, but everyone in the aluminum industry.

So far as predicting exactly what is going to happen in the future, we don't know about that. But we had our first General Motors contract in 1950 at Jones Mills. It is still in existence. And I think there has been no indication from anything we know other than that the smelters and everyone else have increased in number and in volume and in prosperity. Even though we have had this hot-metal contract for some 7 years.

Mr. YATES. I shouldn't monopolize all the time this morning, but I have one more question, then I'll turn the hearing over to my colleagues for a brief few minutes.

If the contract with Ford requires Ford to buy 32 percent of all fabricated and semifabricated aluminum from Reynolds, did Reynolds supply all this previous contract to Ford?

Mr. MCCONNELL. Let me say, if I may, I don't think I agree with you that the contract requires Ford to buy 30 percent from us.

Mr. YATES. That is what my impression is from reading the contract.

Mr. MCCONNELL. Maybe that is the final legal commitment but we are not in a position to require Ford to do much of anything at the time we try to sell it. What had happened at that time, as you will remember, is that we were operating in an entirely different climate from that which we are now operating in in the aluminum business, and I think Ford, who was going into uses of aluminum on a much broader basis, wanted to protect themselves and insure an adequate supply, not only in molten form, but in the form of mill products and so on. We have delivered nothing like that to Ford since we made the contract.

Mr. YATES. Is this 30 percent to Ford at Listerhill, Ala., or 30 percent of the entire Ford requirements.

Mr. MCCONNELL. That is 30 percent of all——

Mr. YATES. Of Ford's complete needs?

Mr. MCCONNELL. That is right. It just has not happened, for a whole lot of reasons.

Mr. YATES. Mr. Multer?

Mr. MULTER. I yield to my colleague, Mr. Riehlman.

Mr. RIEHLMAN. I thought in your initial statement to the committee, Mr. McConnell, that you said one of the reasons you were able to get the financing was that you had a contract with Ford and with General Motors to dispose of about 30 percent of your aluminum?

Mr. MCCONNELL. Those percentages, Congressman Riehlman, came out in a way that I could see why they would be confusing. I was talking about the sale of the molten metal, which, in connection with the total contracts, the 2 contracts—we have a total new capacity of 425 million pounds of primary metal. The two contracts which we made with the companies provide for the sale of approximately one-third of that molten metal. It so happens in the Ford contract that we had another clause which provides for the purchase by Ford from us of approximately 30 percent of their mill products and fabricated parts. But it was not the 30 percent I was referring to. It does not provide for the purchase of any castings from us, because we don't make castings.

Mr. RIEHLMAN. Thank you.

I yield to my colleague, Mr. Multer, now.

Mr. MULTER. Mr. McConnell, you mentioned that there are now 2 additional producers of aluminum in the field, in addition to the 4 that we know about. I don't think you named them.

Mr. MCCONNELL. I don't know what you are referring to, I'm sorry, sir. You mean two primary producers?

Mr. MULTER. Yes.

Mr. MCCONNELL. Olin and Harvey.

Mr. MULTER. Are they in production?

Mr. MCCONNELL. As I understand, Olin is just starting its production. I don't know about Harvey. That is in the first half of next year. Of course, Anaconda is already there.

Mr. MULTER. Are they producing for the general market, or for their own use?

Mr. MCCONNELL. According to their advertising, they seem to want to sell some of it. They are advertising pretty extensively. Certainly Olin is.

Mr. MULTER. How do their advertised prices compare with yours?

Mr. MCCONNELL. I haven't seen any prices advertised so far.

Mr. MULTER. Are they going to cut your price?

Mr. MCCONNELL. We'll just have to see what Olin does on that. I can't speak for them on that.

Mr. MULTER. Now, of course, originally it was the public policy of our Government that dictated that primary production of aluminum should not be in the hands of any one company, and that we should broaden the base of production to as great an extent as possible, which brought about the necessity of the Government stepping in and helping others get into the field. It was that which brought about these contracts, am I not right, that required the Government to take from

Reynolds and from Kaiser and from Alcoa a certain amount of their production?

Mr. McConnell. No; I don't think that those contracts were brought about for that reason at that time. These contracts, as you remember, came into being in the Korean difficulty, and the Government came to the 3 producers—all 3 of them—and asked them to expand the total industry by about 100 percent.

Well, none of the companies at that time—we weren't even selling up to the capacity which we had, as I recall. None of the companies were in a position—I won't say none of them. Certainly we were not in a position to get the financing to do that at that time without some help from the Government. The help which we got from the Government was these 5-year put rights which we have. Obviously, those 5-year put rights would not in any way compensate us for the full price of the plants which we built. It would take longer than 5 years to do that. But they were a help to us in getting the financing, and I trust to the other companies, in getting the financing to build this 100 percent additional capacity for the industry. But I am not sure that at that time the policy which you indicate was the reason for those contracts.

Mr. Multer. Well, when the Alcoa contract was made, that referred only to pig and ingot.

Apparently at that time they were not making billets.

Mr. McConnell. I don't know. I am sorry.

Mr. Multer. When the contract was made with Kaiser and with Reynolds, it referred to pig, ingot, and billets.

Mr. McConnell. I don't know why that is.

Mr. Multer. That is in your contract; is it not?

Mr. McConnell. It may be. I just don't know why it is in there.

Mr. Multer. Well, subject to your reading the contract and correcting my statement, take it that the Alcoa contract refers only to pig and ingot and the Kaiser and Reynolds contracts refers to pig, ingot, and billet.

Now, we have a fourth item, and that is the molten metal.

Is that right?

Mr. McConnell. Well, we are selling molten metal, whatever you want to call it.

Mr. Multer. Well, it is more than just selling it, as I gather. The one new plant with a capacity of 225 million pounds will dispose of 64 million pounds of that production to Ford in the form of molten metal, and 40 million pounds to General Motors in the form of molten metal.

Isn't that so?

Mr. McConnell. Well, that is a different plant. That is the Massena plant in New York. That is another plant with a capacity of 200 million pounds, up in Massena, N. Y.

Mr. Multer. Well, now, doesn't that call for some adjustment of the overall contracts?

Mr. McConnell. Which overall contract?

Mr. Multer. The basic contracts with the Government which fix a price only on pig, ingot, and billet, and now you have molten metal?

Mr. McConnell. I don't see why that should be, sir.

Of course, we had molten metal in being and were selling it at the time we entered into the contracts with the Government. General

Motors had been buying it since 1948 on an experimental basis, and negotiating at that time for the contract which we entered into, as I recall, in 1952.

Mr. MULTER. That is all, Mr. Chairman.

Mr. YATES. I want to ask one question to clarify our discussion on freight.

Can a small fabricator, an extruder, for example, who operates in Listerhill, Ala., hard by your producing plant, get the same freight advantages that Ford gets at Listerhill—the freight deduction—or will he pay freight in his bill?

Mr. MCCONNELL. No. He pays freight allowed to destination, wherever he wants to ship them.

Mr. YATES. So that despite the proximity which he enjoys—while he isn't buying molten metal—he does pay a freight factor that is not paid by Ford Motor Co.

Mr. MCCONNELL. That is right. He does.

Mr. YATES. Thank you, Mr. McConnell, for your very illuminating testimony.

We will let you know whether we would like you to come back.

Mr. MCCONNELL. Thank you, Mr. Chairman.

Mr. YATES. We will recess until 1:30.

(Whereupon, at 12 p. m., the subcommittee recessed, to reconvene at 1:30 p. m., of the same day.)

AFTERNOON SESSION

Mr. YATES. The committee will come to order.

We have the pleasure of again listening to our friend, Mr. Wilmot, who testified so well before our committee 2 years ago at its last hearing.

Mr. Wilmot, who is the vice president of the Aluminum Company of America, has had long experience in the aluminum industry. As I remember his previous testimony before this committee, he grew up with the industry.

Mr. Wilmot, we are pleased to have you here with us and we would like to have you tell us about the aluminum industry and such facts as you think this committee is interested in receiving.

TESTIMONY OF D. WILMOT, VICE PRESIDENT OF ALUMINUM COMPANY OF AMERICA, ACCOMPANIED BY LEON HICKMAN, VICE PRESIDENT AND GENERAL COUNSEL OF ALCOA

Mr. WILMOT. Thank you very much, Mr. Yates. I am D. Wilmot—the D, incidentally, is for Donovan, and, perhaps incidentally, Mr. Sheehan, who is not here, would appreciate that name—vice president of Aluminum Company of America. My office is located in the Alcoa Building in Pittsburgh, Pa., I am accompanied by Mr. Leon Hickman, our vice president and chief counsel.

When I last appeared before this subcommittee at the hearings in May 1955, conditions in the aluminum industry were quite different from what they are today. At that time, the Government was building up its stockpile of aluminum and apparent demand for aluminum in this country exceeded the available supply of metal; every

effort was being made to distribute this inadequate supply on an equitable basis to users.

In 1956, industry shipments increased moderately to an alltime high, but supply grew at a faster rate. Industry shipments for 1957 are expected to show a decline of some 2 to 4 percent from 1956, while the total supply will be about at the same level as 1956. As a result of these developments, coupled with an apparent inventory accumulation on the part of users during 1955 and the first half of 1956, the postwar era of aluminum shortages has definitely come to an end.

This is well illustrated by the fact that stocks of metal on hand at primary smelting plants were many times as large in May of 1957 as they were in May of 1955. Furthermore, according to the most recent Bureau of Mines figures, stocks of primary metal on hand at smelting plants at the first of September 1957 were 88 percent higher than at the beginning of the year.

By the latter part of 1954, we had become painfully aware of the shortage of primary aluminum despite the fact that we and the other producers had greatly expanded aluminum production and were then making plans to further expand our output very substantially. This involves heavy capital expenditures. It costs from $1,000 to $1,500 per ton of annual production for aluminum facilities, which is 3 to 5 times the cost of a ton of steel capacity. This depends, of course, on where you start these operations.

The three major existing primary producers proceeded to increase greatly their capacities. In addition, Olin-Revere (Ormet Corp.) and Harvey decided to enter the field.

Upon completion of all facilities now building or announced the present productive capacity of the domestic primary industry will be further increased by 45 to 50 percent in the near future.

Your hearings held in the spring of 1955 brought the supply situation into very sharp focus.

Despite the present seemingly overabundant supply situation in aluminum, we at Alcoa are very optimistic about the future and are planning accordingly.

Perhaps a brief review of Alcoa's capital expenditures will clearly indicate what we have done and plan to do in order to expand output.

In 1956, more than 43 percent of our total capital expenditures of $139 million went into facilities required for the production of basic aluminum. Such expenditures include, in addition to smelting facilities, the mining, refining, power, and other related facilities needed to expand metal production.

This year, 1957, we are spending approximately $160 million for such metal-supply facilities, which accounts for about three-fourths of our total estimated capital expenditures. More than $80 million are already programed in the budget for next year to provide facilities that will increase metal output.

I would like to comment briefly on a few of the major projects Alcoa has underway. At our smelting plant in Point Comfort, Tex., we are installing a new potline which will be ready for operation on March 1 of 1958. This line will boost the installed capacity of the Point Comfort plant by 40 million pounds annually.

Near Evansville, Ind. (the new plant named "Warwick"), we have under construction a new smelting plant which will utilize electric

power generated in a coal-fired, steam powerplant. Initial operation of this smelting plant is scheduled for late in 1958. The ultimate installed capacity of this plant will be 300 million pounds of aluminum per year, but the actual production schedules for the entire capacity will depend on the trend of business conditions.

Work is also in progress on two new potlines at our Massena, N. Y., works, to utilize power from the St. Lawrence project of the Power Authority of the State of New York.

They will replace older smelting facilities which will become inoperable with the shutdown of our own generating facilities. This shutdown will be necessary when electric power becomes available from the power authority, since Alcoa can then no longer use the water from the St. Lawrence River to operate its own hydroelectric facilities.

The first of the new lines is scheduled to be in operation by late 1958. The installed capacity at Massena will ultimately be increased by 75 million pounds per year.

Last month we appeared here in Washington before the Federal Power Commission in an effort to obtain a 50-year license for certain of our hydroelectric projects in North Carolina.

If this license is granted, Alcoa intends to build a new dam and hydroelectric plant on the Yadkin River, and to modernize and expand its Badin, N. C., smelting plant. Upon completion of this entire project, the productive capacity of the Badin plant would be increased by 46 million pounds of aluminum per year.

You will note that, in contrast to Mr. Lipkowitz, I am still old fashioned enough to refer to these in pounds rather than in tons, and I hope that does not confuse any of you in trying to convert these figures from one to the other.

Mr. YATES. Maybe we ought to take a third standard—instead of having either pounds or tons, perhaps we can agree on something else? Ounces, perhaps?

Mr. WILMOT. Perhaps. In order to acquaint this subcommittee with the future outlook for aluminum, I would like to offer some statistics which will serve as a base for projections.

In 1956, according to the Business and Defense Services Administration, the total United States supply of aluminum, including primary production, recovery of secondary metal, and imports, reached, roughly, 4,697 million pounds.

Shipments of aluminum products to consumers, which are usually referred to as representing total demand, even though they do not reflect inventory changes, totaled 4,109 million pounds, or 588 million pounds less than the metal supply.

Total supply during 1957 is expected to be approximately 4,600 million pounds. It is our best judgment that aluminum shipments to industry will be in the neighborhood of 3,950 million pounds, or 650 million pounds less than total supply.

Based on announced completion of new United States smelting facilities, next year should see a substantial increase in supply.

However, recent developments have convinced us that some of the 800 million pounds increase in primary production forecast by BDSA for 1958 will be delayed and that the increase will turn out to be closer to 500 million pounds. The most recent forecasts we have made—and naturally these forecasts are influenced by today's conditions—

indicated a total demand of 1958 ranging somewhere between 4,150 million and 4,350 million pounds, or 5 to 10 percent above the current year.

Of course, shipments of primary metal to the Government stockpile will reduce the anticipated surplus materially, but will still leave a substantial excess of supply over demand.

Obviously, the producers would prefer to ship to civilian customers rather than to the stockpile.

In connection with our shipments to the Government, I wish to point out that on September 13, 1957, Alcoa agreed to an amendment of its two supply contracts with General Services Administration under which certain Korean-emergency aluminum facilities were financed and built by the company.

Under this amendment, Alcoa agreed to increase the amount of aluminum to be made available to the nonintegrated users for a period of 15 years from 25 to 35 percent of the contract capacity of these plants.

This amounts to 35 percent of 410 million pounds, or 143.5 million pounds a year. This commitment became effective for the Point Comfort, Tex., plant as of March 4, 1957; for Wenatchee, Wash., August 8, 1957, and for Rockdale, Tex., will become effective on approximately July 1, 1958.

It supplements the earlier 5-year contract commitment to make available to the nonintegrated users 66⅔ percent of the contract production less such amounts as are taken by the Government.

Returning to the future outlook for aluminum supply and demand, I am confident that users will be able to obtain generous supplies of aluminum to meet their needs for the foreseeable future.

In fact, the real problem facing the industry is to develop new uses to absorb the immense increase in supply. This does not mean that demand for aluminum will fail to grow. It most surely will grow—and, we hope, rapidly. Recent studies made by our commercial research division indicate that if generally good business conditions obtain, demand should increase from its current level of nearly 4 billion pounds to around 5 billion 700 million in 1960 and 6 billion 600 million in 1962.

I don't recall the exact figures given by Mr. McConnell, but I think there is very little difference between the estimates presented by him and those hereby presented.

I might add more or less parenthetically here that if these new hearings of yours will produce as much new business as the supply has increased after the last hearings, it would be a boon all around, I think.

Mr. YATES. Mr. Wilmot, we will do our best.

Mr. WILMOT. Very good.

I am sure you will.

Assuming that this demand does materialize, one may ask—will supply be adequate to fulfill this demand in 1960 and 1962? I will deal with that a bit later.

Here is a copy of a table—I believe you gentlemen have been supplied with that table, but we failed to include that in the original statements forwarded to you last week—here is a copy of a table published in the September 28, 1957, issue of the American Metal Market, showing the primary aluminum ingot capacity in the United

States and Canada, by company and plant, as of June 30, 1957, as well as facilities being built or planned.

Understand, this is the total production from these facilities.

(The table appears on p. 85.)

Mr. YATES. Does this chart reflect cutbacks like that now proposed by Aluminium?

Mr. WILMOT. I am sorry——

Mr. YATES. Does this chart to which you are referring reflect the cutbacks in proposed expansion such as the one proposed by Aluminium?

Mr. WILMOT. I would like to refer that question to one of our men. His answer to that is "No."

Mr. YATES. Then this is the program as anticipated before announcements of cutbacks, is that right?

Mr. WILMOT. That is right.

Mr. YATES. Thank you.

Mr. WILMOT. You will note that the total future United States capacity will be 2,567,000 tons (5,134 million pounds) when all facilities that are under construction or have been announced are completed.

For purposes of building up an estimate of total supply, suppose we use a conservative production figure of 5 billion pounds for 1960.

With regard to potential future primary imports, the aggregate quantity of metal imported for the 7 years, 1950–56, represents 16 percent of the total production of primary during the same period.

If this same percentage is applied to the estimated primary production of 5 billion pounds, imports will reach 800 million pounds in 1960. This figure appears entirely reasonable based on the projected expansion of Canadian plants and the obvious interest of the Canadian producers in serving the American market.

In addition, there is increasing interest in the United States market on the part of many other foreign producers. However, to be more conservative, we have revised the 1960 import figure downward to 600 million pounds.

The total recovery of scrap during the past 7 years has amounted to 28 percent of aggregate primary production. Using 24 percent as a more conservative estimate for the future, we believe recovery of secondary aluminum in 1960 should total about 1,200 million pounds.

Altogether, it appears that conservatively the total supply of aluminum in 1960—adding 5 billion primary, 600 million imports, and 1,200 million secondary—will reach 6,800 million pounds. This is not only larger than our 1960 estimated shipments of industry of 5,700 million pounds, but also is above the 6,600 million pound annual demand projected for 2 years later.

Hence I am answering here my own question proposed earlier. I trust these estimates will alleviate any fears this subcommittee may have regarding the supply of aluminum that will be available for users in the next several years.

As stated earlier, the major problem facing the industry today is to find markets for the fast-growing output from the new facilities that have already been financed and are scheduled to come into operation over the next few years.

Our success in meeting this problem rests squarely on the industry's ability to develop new uses and to provide better products for existing markets.

That has been rather a theme song of mine for some little time. In industry meetings and so forth I have urged everyone to take an active part in this, on the theory that this is not a case of any one individual sitting back and letting George do it, but that everyone should pitch in. I am sure that this is going to take some doing and some time.

But it will be done.

We at Alcoa are working hard to stimulate aluminum consumption. We have been adding men to our sales force, and historically we have always trained these men to be what we called human question marks, inquiring reporters—we train them to look at any other material, metal, and bore in to find out why aluminum should not be substituted.

If they don't do it then they are not compatible with our thinking and should not be in the aluminum business.

It has been that kind of thing which has been responsible, I think, in large measures for the progress aluminum has made and the inroads in other material.

To assist our field sales forces, we carry on extensive and farflung research and development activities. Our sales development division, for example, was established more than 30 years ago to provide customers with engineering service.

We have a total of 133 people in that division, incidentally, of which 100 are trained engineers, well schooled in the ramifications and advantages of aluminum, and its disadvantages, wherever they exist.

The services of these specialized engineers are available without charge to any manufacturer, big or small, who is interested in developing a new product or improving an old product by the utilization of aluminum in whole or in part.

The men in this division are continually making calls on manufacturers located all over the country and arranging for representatives from such manufacturers to visit Alcoa's plants and research laboratories.

These men incidentally are divided largely by industry; there are specialists in the automobile industry, specialists in the container industry, packaging, and so forth, so they concentrate their attention rather than try to cover the whole broad field.

During such visits to our plants their representatives are instructed in the proper techniques of forming, welding, and finishing the various alloys and semifinished products of aluminum.

Much if not most of the enginering service rendered by this division is accorded to small manufacturers, who usually have the will to use aluminum, but not the know-how.

The persistent efforts of our sales development division and the many outstanding accomplishments of our various research laboratories have traditionally been made available to small business concerns, many of which compete with Alcoa in the fabrication of aluminum products.

I can assure you that our efforts to assist and encourage the small fabricator or manufacturer are not completely unselfish. Our experience has always been that these small users of aluminum will and do multiply in number and increase in size, their need for Alcoa's products thereby increasing, and we both benefit.

I might add here that not only does Alcoa try to help the small customer whenever possible, but we are also quite dependent on

small business for purchased supplies and services necessary to carry on our operations.

In a recent typical 12-month period, our purchasing department bought supplies and services from about 20,000 different vendors. More than 83 percent of these companies (16,675) were small businesses employing less than 500 people.

We are also backing up our sales forces in the field with major expenditures on promotional campaigns, advertising programs, television and radio. Other producers are doing likewise.

Some of these promotional activities are aimed directly at the ultimate consumer, examples being building products, household foil, furniture, and sporting goods.

This type of merchandising campaign is unusual for producers of raw and semifabricate products. Actually, you see, we are producers of crude and semicrude aluminum. We cannot determine the exact markets for the end products which the retail public buys. If our friends in the automotive business don't sell automobiles or the others do not sell appliances, or they don't put up buildings, it is a little difficult for us to sell aluminum, or at least our sales will be correspondingly effective.

However, this is a case where we are trying to go through these media directly to the retail users, and thereby bolster an increase or accelerate the use of aluminum.

When we do that we are, I think, being quite helpful to small business, because they are in a very capable position to benefit from and to cash in on these activities.

We in Alcoa are convinced that vigorous sales promotions in all markets, technical advances through research and development, and a plentiful supply of metal will provide great impetus to the already general acceptance of aluminum in this country. A quick look at several markets which offer tremendous growth potential may prove interesting to you.

One such market is the passenger automobile. Ten years ago the average use of aluminum was about 12 pounds per car. In the 1957 models, according to our best estimates, there was an average of about 40 pounds of aluminum in each car. Much of this was made up of pistons, automatic transmission components, and other functional parts.

Aluminum trim in colored and natural finish is coming into more widespread use, and trim applications on 1958 models will show more than a 40 percent increase over this year's cars.

There is nothing new, as was indicated in the Reynolds statement, about the use of aluminum in automobiles. At one time we actually had a foundry in Buffalo almost across the street from Pierce-Arrow where the body parts were made as castings. And that goes back into the early twenties and before that.

Mr. YATES. You would not say the demise of the Pierce-Arrow was attributable to its use of aluminum, would you?

Mr. WILMOT. I hardly think so. There could have been other contributing factors, Mr. Yates. You are probably a little too young to remember.

Mr. YATES. I remember it.

Mr. WILMOT. 11 of the 17 makes of automobiles are featuring aluminum grills on 1958 models, and a considerable number of models use decorative side panels of aluminum.

I cite these illustrations to point out that aluminum is gaining rapidly in popularity among automobile manufacturers, a fact which will likely be brought out here tomorrow in more detail perhaps by various people from Detroit.

As we view this market today, it appears that a reasonable target for practical automotive applications is 300 pounds of aluminum per car. How soon this objective will be realized is anybody's guess, but we are dead certain that it will not be reached overnight.

Generally speaking, we know the applications for which aluminum will be used in models at least 1 and often 2 years ahead. If aluminum were to be used on any major scale for a new, large part such as an engine block, we would be aware of this metal requirement we are quite certain, at least 2 years in advance. This would provide ample time to construct any necessary additional production facilities.

Another market that offers tremendous potential for aluminum is residential construction. Encouraging progress has been made in this field. Notable aluminum applications are primary and storm windows and doors, and screening. However, it is doubtful if the average new house built today utilizes much more than 30 pounds of aluminum. In an effort to stimulate this market, Alcoa has embarked on an extensive promotional campaign involving the erection of 23 ranch-type model homes throughout the country, 1 of which is located right across the Potomac in Alexandria. It just opened for public showing last Saturday, and I hope that everyone here will go take a look at it.

Designed by one of the Nation's leading residential architects, this aptly named Alcoa carefree home is a modern dwelling constructed to dramatize aluminum's potential contribution to home building both today and in the future.

This "carefree home" uses more than 7,500 pounds of aluminum in its construction.

It is not anticipated that everybody who puts up a house is going to use 7,500 pounds of aluminum in its construction, but the effort here is to point out many applications which will prove themselves to be economically feasible and to promote imagination and thought as to the use of aluminum in such construction.

It would be wishful thinking on our part to expect to put that much aluminum into the new houses built next year, or even in 1960. But this home is demonstrating to prospective homeowners the advantages of aluminum over conventional building materials for many important applications and it is showing builders where they can use aluminum economically and efficiently in construction. We naturally expect to benefit substantially from our pioneering efforts in this field.

But the small fabricators will likewise participate to a major extent, just as they have in the past. In fact, during the past 12 years the residential construction market has served as a most lucrative field for small-business concerns.

A third market worthy of mention because of its potential is the broad field of containers and packaging. The packaging of foods, confections, chemicals, and drugs in aluminum foil has grown rapidly

since World War II, and this growth is expected to continue unabated for many years.

In recent months considerable publicity has been given to applications for aluminum in the rigid-container field. It has been announced that aluminum motor-oil cans will be made by 2 can manufacturers, and 1 food company has announced it will package grated cheese in aluminum cans.

Incidentally, cans are used to a much greater extent in Europe than they are here—aluminum cans, I mean.

While these developments are most encouraging, they are not as yet conclusive as to the potential tonnages the aluminum industry can anticipate.

The rigid container market is hardly a new field for aluminum. Prior to World War II, test packs of tunafish were made successfully in aluminum cans by west coast fisheries.

Nearly 13 years ago 2 well-known brands of pipe tobacco were marketed in aluminum cans. Aspirin containers and a host of other can types have been produced in aluminum. Obviously, the rigid container market presents enormous volume possibilities to the aluminum industry where the inherent properties of the metal offer certain economically justifiable performance advantages. In most instances, however, substantial adoption of aluminum cans must await extensive product testing as well as successful solutions to cost and fabricating problems in comparison to current large volume competitive rigid packaging materials.

In other words, we don't expect to displace the steel containers overnight by any means. We believe aluminum cans will ultimately be used for many purposes, but it is unlikely that wide-scale usage will develop faster than the industry will provide production capacity.

There is little doubt in our minds that consumption of aluminum over a period of years ahead will continue, as in the past decade, to grow at a much faster rate than the national economy. Historically, the users of aluminum have benefited extensively from expanding markets, and I see no reason why they should not continue to do so.

Such growth in aluminum consumption will bring into being new users and will offer greatly expanded opportunities for those in business now.

Some indication of the growth that has occurred since World War II in the number of firms fabricating, processing, or using aluminum, has been provided periodically by Modern Metals magazine.

You referred to that this morning, Mr. Yates, in your statement. And I might add while I am on that subject that if there has been a demise of 3,000 or 4,000 firms, it has not come to our attention.

We think we keep a very close eye on that situation. And I actually cannot of my own recollection think of one significant failure or loss of customers. I will have to add that we have been much surprised that with business conditions as they have been recently that there have not been more of them.

But actually I know of no significant loss of customers, and I am sure that had that occurred—it seems to me that I would be one of the first to hear of it from the Treasury Department and others.

Mr. YATES. I have here a copy of the survey to which I referred. This was mailed to me by Mr. Griffin of Modern Metals. And as you

can see, this is a chart which covers the entire light-metals consuming industry by States. It goes into the building industry, consumer durable goods, containers, packaging, the electrical industry, containers, and equipment, et cetera.

I tried to make it clear in my statement this morning that these were not only fabricators but also consumers of aluminum. The construction industry is a consumer of aluminum.

Some of the firms which were engaged in the construction industry may have gone out of business because of the decrease in the construction of homes. But this survey does show that 4,400 plants in the original listings that they had 2 years ago no longer are producers or consumers of aluminum.

It does say that there is a slightly increased number which have entered the field. And as I pointed out this morning, the committee hopes that as a result of these hearings we may be able to find some means of checking the number of those casualties.

If you want to see this when the hearings are over we will be very glad to show it to you.

(This survey appears in the appendix, facing p. 436.)

Mr. WILMOT. As a matter of fact, I have a copy of it.

May I suggest the advisability of going back to Bill Griffin and asking him if he could get some sort of a reading as to these defections, or disappearance of some of these firms from the aluminum field?

I am surprised that he would make a statement like that without some accompanying reasons.

Mr. YATES. My interpretation of the statement is accurate; is it not?

You have a copy?

Mr. WILMOT. Yes, I have that.

Mr. YATES. He pointed out that he wanted it in my hands before I started our hearings, and I would be glad to suggest to him your recommendation.

Mr. WILMOT. We would be supremely interested, because we keep, of course, a pretty careful tabulation of the number of customers we have, and we find here—I took the pains after the hearing this morning to check with our people in Pittsburgh, and we have information now to the effect that we had more customers at the end of 1956 than we had at the end of 1955.

Mr. YATES. Perhaps these are customers of Kaiser and Reynolds, then?

Mr. WILMOT. Maybe—we hope that they are not ours at any rate.

This is by actual count. Of course, it is usually true in any business, I believe, that a small percentage of the total will take a larger percentage of your output. But in any event, it is hard to reconcile these things with our own experience, because, as I said, there has been no single case of any company of significant proportions brought to my attention which has failed or disappeared from this consuming field.

Mr. YATES. It is a significant number, is it?

Mr. WILMOT. It certainly is. It is very mystifying.

Mr. YATES. Did you want to finish the last paragraph of your statement?

Mr. WILMOT. Yes. I lost track for a moment.

The most recent modern metals survey which has just been published shows a substantial increase in the number of plants using light metals from 24,084 to 25,339.

Incidentally, that compares with something like 17,000 in 1951 and 8,000 in 1947 and 4,500 in 1945.

Practically every segment of the industry and nearly every market shows an increase in the number of participants during the past 2 years and we are confident that future surveys will register further growth.

Under our economic system, the success of any business or industry, large or small, must be earned in the market place by hard work and ingenuity, by integrity of products, service and policies—and I am going to add the word "speculation," and at the risk of the investors.

It is our hope and expectation that all segments of the industry will intensify their efforts during the coming years to sell aluminum for new applications and to expand existing markets. We assure you that Alcoa will accept its responsibilty for any expansion needed to satisfy the resulting demand.

Mr. YATES. Thank you for a very fine statement, Mr. Wilmot.

I would like to refer to it for a few questions.

At page 2 of your statement, you say

> It costs from $1,000 to $1,500 per ton of annual production for aluminum facilities, which is 3 to 5 times the cost of a ton of steel capacity.

What is the comparable profit on aluminum and steel?

Since you compare the cost, should not a comparision be made of the profit as well?

Mr. WILMOT. If I can recall these figures—I think there is not a great deal of difference, if you relate net earnings to investment.

Mr. YATES. It is more profitable to go into the steel business than it is to the aluminum business, then—is that true?

Mr. WILMOT. I would rather, I think, leave that question to the steel people than to us. We are concerned principally with the amount of profit we make on our investment. And I was, I think, principally pointing out here by these means that to go into the aluminum business requires a very heavy investment and risk, consequent risk on the part of the individuals who invest in it.

Mr. YATES. The steel people tell us the same thing. I don't know if I would have gone into it, the question of profit, if this statement had not referred to it. If it costs 3 to 5 times more to go into the aluminum business than the steel business, why isn't Alcoa in the steel business rather than making aluminum?

Presumably you must have a greater return?

Mr. WILMOT. Well, I cannot give you the figures just offhand, Mr. Yates, on return. I think we have them somewhere, and they would certainly be available.

Mr. YATES. Would you say that the figure is comparable to the equation you use here?

Would you say the profit is 3 to 5 times greater than it is in the steel business?

Mr. WILMOT. Decidedly not. I don't have those figures as to the return on investment here. We do have them, and they are readily available, if it would serve any purpose for the committee.

Mr. YATES. Your statement further down on that page is to this effect:

In 1956 more than 43 percent of our total capacity expenditures of $139 million went into facilities required for the production of basic aluminum.

That leaves 57 percent undescribed.

Did that 57 percent go for the expansion of your own fabricating facilities?

Mr. WILMOT. By the process of deduction, yes, it would. We of course are expanding our own fabricating facilities as well as the facilities for the production of the basic material.

Mr. YATES. Historically Alcoa was a producer of the primary metal.

Can we take from this statement that Alcoa is now moving more and more into the fabricating field?

Mr. WILMOT. As a matter of fact, Mr. Yates, the aluminum company has always been in the fabrication field, and very heavily.

Mr. YATES. Well, for a while it was the sole producer of primary metal.

Mr. WILMOT. That is true.

Mr. YATES. And then Reynolds and Kaiser came into the field as primary producers and as fabricators.

Mr. WILMOT. But at the time we were alone in the smelting of primary aluminum, we were also a very large factor in the fabricating field.

Mr. YATES. That is true.

Mr. WILMOT. Actually I think that our capacity to fabricate would be something in the order of, oh, 75 to 100 percent above the capacity to produce the basic material. That is usually true, I think, because you get——

Mr. YATES. You get the two-thirds ratio?

Mr. WILMOT. Well, you get a swing from one product to another, you have a heavy demand in one, and you have to provide for those peaks of demand in the fabricating facilities.

Mr. YATES. The hearings that we had 2 years ago had certain charts.

From those charts the staff has computed figures to show that out of the total primary that you produced—and I think it may substantiate what you just stated, for 1954, at least, which are the last figures we had—of the total primary that you produced you consumed for your own purposes 69 percent. Is that about true?

Mr. WILMOT. Well, I assumed——

Mr. YATES. This was not one of your statistics; this was a figure that we worked up on the basis of the figures that appeared, and I wonder if this figure you would think would be fairly accurate?

Mr. WILMOT. Yes. I cannot tell you just offhand what those figures are at present, how they divide between the amount of metal which we supplied the nonintegrated segments of the industry, and that which we consume ourselves.

We will get that figure for you.

Mr. YATES. We would be pleased to have it.

Mr. WILMOT. I think we have it around here somewhere.

Just calling on my recollection, and without the figure before me, I think that percentage would not have changed very much.

Mr. YATES. In subsequent years to 1954?

Mr. WILMOT. No. I appreciate, Mr. Yates——

Mr. YATES. Our computations also show that Reynolds used 58 percent and Kaiser used 46 percent of its primary production for their own purposes, too.

Now, on page 5 of your statement you discuss the amendments of the contracts of General Services Administration.

Why did Alcoa consent to those amendments?

Mr. WILMOT. Mr. Yates, may I refer that question to Mr. Hickman?

Mr. Hickman negotiated those contracts originally, and has been extremely——

Mr. YATES. You mean the basic contracts?

Mr. WILMOT. The first contracts; the original contracts.

Mr. YATES. For the expanded capacity?

Mr. WILMOT. That is correct.

Mr. YATES. And also these amendments?

Mr. WILMOT. That is right. And he would therefore be much better qualified to give you the chapter and verse of that than I would be.

Mr. YATES. I thought this would be a matter of policy as to why Alcoa——

Mr. HICKMAN. We speak to each other between negotiations.

Mr. YATES. You are two very fine gentlemen; I assume that you would.

And I assume you will here too.

But tell me, why did Alcoa consent to them?

Mr. HICKMAN. If I have your permission to answer for Mr. Wilmot a minute, we consented in order to settle a dispute.

The General Services Administration was taking the position that Canadian metal purchases should be deducted from our "put" rights, and in the meantime we were high up in surplus of production on the assumption that we had "put" rights.

A lawsuit was going to be of small comfort to us even if we won it some years hence, so we compromised the matter, as lawyers often do.

Mr. YATES. Do you feel here was consideration for the amendments?

Mr. WILMOT. I did not understand the question.

Mr. YATES. This is a legal term, and I assume you want your counsel to answer it.

Mr. HICKMAN. It is thin, but I think so.

Mr. YATES. I asked the same question of Mr. McConnell this morning. I am sure you were present in the hearing room. I asked how this differed from the scrap situation. Presumably the reason that the Government raised the objection to your being able to use the imports for your ordinary purposes and still put to the Government for the entire capacity of the plant or that portion of it which was not utilized on the open market, was that it felt that as long as it did not want the metal you should not be able to import it from Canada.

Isn't this true of the scrap situation as well?

Mr. HICKMAN. Yes; one could make that argument very effectively. But I think you have to go back into the industry as it was when the contracts were made.

We contended on Alcoa's side that the contracts were made on the flat ground of knowledge, that historically scrap had always been purchased, and had to be purchased in a certain ratio to primary production in order to take it off the market and in order to take care of your casting business.

We also contended that there was a pattern to the Canadian metal purchases that existed at the time the contract was entered into, and that the contract had been entered into in recognition of those historical patterns, and that no deduction was contemplated.

That was disputed in the controversy of last summer.

The matter was submitted to the General Accounting Office for a ruling, and we got a ruling that these contracts had been drawn in the light of those historical patterns; in other words, that the companies were right in their basic argument with the Government.

You ask why the pressure was on the Canadian metal purchased as a required deduction from put rights, and not on secondary metal.

You probably can answer that question better than I.

I can only say that political pressure built up behind to the point where they would not stand for Canadian imports at the time the puts were made.

The same logic, I think, would have been back of the fact that they would not stand for secondary purchase.

But one was a foreign purchase and the other one was domestic; there are intangible psychological factors there.

Mr. YATES. They are comparable instances?

Mr. HICKMAN. I think they are quite comparable.

Mr. YATES. As a part of the amendments, an allocation has been agreed to for nonintegrated users for an additional period of 15 years, and the amount set aside for their use has been expanded from 25 percent to 35 percent. Is this correct?

Mr. WILMOT. That is correct.

Mr. YATES. For purposes of this provision, how would you define a nonintegrated user? Would General Motors and Ford, for example, be considered nonintegrated users?

Mr. HICKMAN. The contract is specific in defining "nonintegrated user." And if I may, I will read it. This is in the two Alcoa contracts, and I surmise the others are not substantially different. This is in both of our GSA contracts.

Mr. MULTER. What article is that, please?

Mr. HICKMAN. Article 3, paragraph 2 on page 5.

Mr. WILMOT. I think you have a different version there, Mr. Multer.

Mr. HICKMAN. Article 3, paragraph 2, reading down 6 or 8 lines:

As used in this agreement, the term "nonintegrated user" shall mean any manufacturer, fabricator, finisher, or producer of aluminum in the United States who is not a producer of primary aluminum or an affiliate or a subsidiary of such a producer, and who is purchasing aluminum hereunder for his own manufacturing, fabricating, finishing, or producing operations.

It makes no distinction on the basis of size. A nonintegrated user in this contract is simply one who does not have smelting facilities.

Mr. WILMOT. Primary facilities.

Mr. YATES. All right. Accepting your interpretation for the moment, I ask you whether or not under a hot metals contract such as Reynolds has with Ford and General Motors, the customer is considered to have primary metal facilities so that he would fit within the definition?

Mr. HICKMAN. You mean under the Reynolds situation?

Mr. YATES. Yes.

Mr. HICKMAN. Is General Motors considered to have——

Mr. YATES. Presumably, they are not buying pig or ingot, which I assume was contemplated at the time these contracts were executed with General Motors. I do not think they thought about hot metal at that time.

Mr. HICKMAN. General Motors is not a producer of anything in the aluminum line. I mean it is not a producer of hot metal or pig. So whether you accept Mr. McConnell's classification or not, they still remain a nonintegrated user of aluminum, I would say.

Mr. WILMOT. Under this contract.

Mr. HICKMAN. Under this contract definition. They have got to be a producer of primary metal in some form to become integrated.

Mr. MULTER. The Alcoa contract refers only to pig and ingot?

Mr. HICKMAN. That was an oversight. I think ours was actually concluded first. The others also referred to billet; but a couple of years later, by a letter amendment, ours was enlarged to apply to billet as well; so they are the same.

Mr. YATES. I asked you about hot metal. Would a user of hot metal fit within that definition?

Mr. HICKMAN. Would a user of hot metal be a nonintegrated——

Mr. YATES. Yes; because of the fact that he is not using pig, ingot, or billet; is he?

Mr. MULTER. In other words, all the three contracts refer to pig, ingot, and billet?

Mr. HICKMAN. Yes.

Mr. MULTER. No mention of molten metal or of hot aluminum?

Mr. HICKMAN. You are asking whether a sale of hot metal is a sale of pig or ingot?

Mr. YATES. I am asking whether a sale to a user of hot metal is a sale to a nonintegrated user within the definition that you just gave?

Mr. HICKMAN. Oh, yes; I have no doubt about that because a nonintegrated user is anyone who does not produce—let me get the words—"who is not a producer of primary aluminum." Now, I say the auto companies are not producers of any kind of aluminum in buying hot metal. They are purchasers, not a producer.

I could be wrong, but that seems very plain to me.

Mr. WILMOT. I quite agree with your interpretation.

Mr. HICKMAN. Then I withdraw the fact that I might be wrong. Mr. Wilmot agrees with me.

Mr. YATES. That is the Supreme Court, I take it.

So that on that basis, if Reynolds ships 35 percent of its production of new capacity to General Motors or to Ford it has met its requirements under the contract with the Government?

Mr. HICKMAN. That depends on the argument that you were having with Mr. McConnell.

Mr. YATES. You mean the discussion.

Mr. HICKMAN. Yes; the discussion, on which I ought not take a sideline position. That is, this contract refers to selling at 35 percent of your production of pig, ingot, or billet. Now, is hot metal pig, ingot, or billet, or is it a fourth category? Mr. McConnell expressed the opinion, I thought I heard him say, that it was a fourth category, and that is a nice lawsuit in itself.

Mr. YATES. Do you have any opinion on whether or not it is a fourth category?

Mr. HICKMAN. Not that is available here, unless you compel me to express it.

Mr. MULTER. Can we not qualify him as an expert?

Mr. YATES. I do not know whether a lawyer can be an expert witness in aluminum.

Mr. HICKMAN. You know they are not.

Mr. YATES. What was the price of primary metal at the time of our hearings 2 years ago?

Mr. WILMOT. 21.5 cents.

Mr. YATES. That settles that.

Mr. WILMOT. Incidentally, there was an error in your statement—I know one of inadvertence.

Mr. YATES. You mean my allusion to 19.5 cents?

Mr. WILMOT. 19.5 cents.

Mr. YATES. That is correct. I have sought to correct the record to show that it was 21.5 cents, and I compromised with Mr. McConnell on his statement of 22.5 cents.

Mr. WILMOT. I know the price changed on January 13, 1955, and is so stated in your report of the hearings in 1955, incidentally, Mr. Yates.

Mr. YATES. To what?

Mr. WILMOT. To 21.5 cents.

Mr. YATES. From what?

Mr. WILMOT. And is in the report of the previous hearings.

Mr. YATES. What was the price prior to the 21.5 cents?

Mr. WILMOT. Do you have the records there? We will have it in just a second. It was 20.5.

Mr. YATES. It went up a cent?

Mr. WILMOT. As a matter of fact, I have it here before me now. On August 5, 1954, the price went up from 20 cents to 20.5. I refer to pig. On January 13 it went to 21.5. So that the increase was something of the order of 20 percent.

Mr. YATES. What is the price today?

Mr. WILMOT. It is 26 cents.

Mr. YATES. That is rather a substantial increase, is it not? I wonder whether or not the price of your fabricated products, your fabricated and semifabricated products, has had a corresponding increase in the 2-year interim?

Mr. WILMOT. I cannot give you the exact figures, Mr. Yates, but I think we would find that the published schedules of our fabricated products, when they changed, would be about the same percentage, would show about the same percentage increase as the percentage increase in the price of the basic material.

Mr. YATES. You are selling the same items in your catalog today that you sold 2 years ago, are you not?

Mr. WILMOT. Yes.

Mr. YATES. So that you could calculate what the increase in the same items over the last 2 years was, to determine whether or not the percentage of increase is the same?

Mr. WILMOT. That is right.

Mr. YATES. As to the increase in the price of billet, do you have that answer handy at the moment?

Mr. WILMOT. I do not have it right here; no. I do know, however, that when we computed this last increase in published prices, we

computed, of course, what the percentage increase in the price of the basic material was—in other words, pig—and also the increase in the prices of the fabricated products for which we have published schedule prices.

Mr. YATES. If the prices have not risen to the same extent as the price of pig, those who purchase pig, like the small fabricators, and compete with the primary producers in the sale of fabricated and semi-fabricated forms, run into difficulty; do they not?

Mr. WILMOT. They would if that were true or if the fabricator were entirely dependent upon the use of primary for his operation.

Mr. YATES. Yes.

Mr. WILMOT. Of course, you have very large quantities of scrap and secondary as well. It is a very large factor, as would be indicated from some of the figures I have given. But I might say this to you: We are thoroughly conscious of the position of the small fabricator in this business, and when, for example, there is an increase in labor rates, which unfortunately we have been getting year after year, whether there is an accompanying increase in productivity or not—when there is an increase in labor rates—we recognize full well that any independent or nonintegrated fabricator who purchases the basic material will have presumably also an increase in the labor cost of converting that into his end product; and hence the prices for our fabricated products will reflect the increased cost of converting the basic material into that product, whatever it may be. Is that clear?

Mr. YATES. Is this increase from 21.5 cents to 26 cents in the last 2 years attributable to the increased labor cost?

Mr. WILMOT. I cannot say every one was. There might have been one adjustment which had not been preceded by a labor increase. But, unfortunately, we have all of these added costs. You immediately get increases or we have had increases in transportation costs, one right after another. We have had increases in the cost of materials which are required in the production of aluminum.

Mr. YATES. Do you pass your transportation costs on to your customers?

Mr. WILMOT. I took the pains to send for the exact price schedule here, because of the discussion which took place this morning. I do not think I would want to burden you with the extremely legalistic nature of this standard transportation clause that we have.

Mr. YATES. It is no burden. We would like to know about it. Just put it in the record if you want to.

Mr. WILMOT. Suppose we present you with a copy of this schedule, which will give you that clause in full?

Mr. YATES. Without objection, we can put it in the record.

(The schedule referred to appears in the appendix, p. 438.)

Mr. MULTER. May we have a layman's explanation?

Mr. WILMOT. Yes, the layman's explanation of it is this: The material is sold f. o. b. shipping point, but with full freight allowed to destination irrespective of the quantity or the distance. In short, it is the postage stamp system. We sell pig from Alcoa or Massena to San Diego, Calif. It is delivered at the 26-cent price at that point, or at any other location of the country—East, North, South, or West. It is the postage stamp system—it absorbs in the price the average cost of the transportation.

Mr. YATES. And the actual cost of the freight then is deducted by the customer; is that correct?

Mr. WILMOT. No. We deliver, although it is f. o. b. shipping point.

Mr. YATES. That is right; when you use the term "f. o. b. shipping point," somebody has got to pay the freight.

Mr. WILMOT. We do that only to establish the fact that once it is loaded on the cars, any loss in transportation or claims would be his. But I think I am correct in saying that we actually prepay the freight.

Mr. YATES. You prepay the freight?

Mr. WILMOT. Yes, in most cases.

Mr. YATES. Do you differ in this respect from the way Reynolds operates?

Mr. WILMOT. I think not.

Mr. YATES. They prepay the freight, too?

Mr. WILMOT. I cannot be sure.

Mr. MULTER. That wasn't the explanation Mr. McConnell gave.

Mr. WILMOT. I think we differed on that point.

Mr. MULTER. Correct me if I am wrong. I thought Mr. McConnell said that customers——

Mr. WILMOT. I think he did.

Mr. MULTER. Billed the full price, and then instead of giving him the full price in dollars, he gives him the price in dollars plus a freight bill which the customer has paid.

Mr. YATES. Full price deducting the cost of freight?

Mr. MULTER. That is right. He gives him the price less the freight.

Mr. YATES. That is right.

Mr. MULTER. To cover the balance of the price, he presents the paid freight bill?

Mr. WILMOT. Mr. Multer, I think there was some little confusion there on that subject, but may I merely say that our policy is that we used the expression "f. o. b. shipping point," but the effect of our arrangement is that the transportation cost is included in the selling price.

In other words, the individual who buys a carload of pig from us gets it at 26 cents per pound and has no freight cost to pay.

Mr. YATES. No matter where he is located?

Mr. WILMOT. Never mind where he is located.

Mr. YATES. If you ship from Pittsburgh to a man in Pittsburgh, the price is the same to him as it is to a customer in California?

Mr. WILMOT. Exactly, the postage stamp basis.

Mr. MULTER. Does that not then put an incentive on the shipper—Alcoa, Reynolds, or Kaiser—to ship to the customer nearest their place of shipment, because there is that difference in profit then that is earned by the shipper? The less the freight, the more he makes, the more the shipper makes, is that not so?

Mr. WILMOT. It has all been computed, and whatever that average price or the average cost to us per pound of the transportation allowance, is included in the price.

Mr. MULTER. Now, I am more confused than before because now you are talking about average freight price or average price taking into account average freight. If it is averaged out, then your profit would be the same to the distant buyer as to the near buyer; but if it is actual freight that is paid, then if you ship to somebody close by,

there is the difference between the cost of that freight and the one to the coast further away.

Mr. WILMOT. That is right.

Mr. MULTER. And you make that additional profit?

Mr. WILMOT. I referred to it as the postage-stamp basis. You can send a letter—Uncle Sam will send a letter from here to Seattle or from here to Alexandria for 3 cents, for a 3-cent stamp; and that is exactly the basis which is used here. So that all competitors are on an even basis.

Mr. YATES. But that is not the way it works, though, is it? A 3-cent stamp will take a letter either to Washington or to California, assuming we mail a letter from here.

Mr. HICKMAN. Or across the street.

Mr. YATES. That is right. But in your shipment of aluminum, there is no certain fixed price that one pays. He will pay a certain amount for aluminum, but freight varies from place to place with what you pay for it?

Mr. HICKMAN. But it averages out.

Mr. YATES. And that average amount is included in the price?

Mr. WILMOT. Exactly.

Mr. YATES. Which you charge.

Mr. WILMOT. Could we resolve it this way, Mr. Yates——

Mr. YATES. I would like to.

Mr. WILMOT. By saying that if we were to ship a carload of pig to Mr. A in Seattle, he would pay 26 cents a pound for it.

Mr. YATES. And not pay any freight on it?

Mr. WILMOT. No.

Mr. YATES. Other than that which has already been included as an average freight?

Mr. WILMOT. Exactly.

Mr. YATES. In the price of the aluminum, an average freight factor is included in that price?

Mr. WILMOT. If we were to ship to Mr. B from Alcoa to Knoxville, which is 10 miles away, that individual would pay 26 cents a pound for it. And if it were shipped to Miami, Fla., the individual in Miami would get the carload at 26 cents a pound.

Mr. YATES. Now, the Government buys aluminum from you at a published price?

Mr. WILMOT. Right.

Mr. YATES. What does the Government pay?

Mr. WILMOT. That gets to a complication at the moment, in that in this agreement which we recently made, which Mr. Hickman recently made with the Government, we agreed to invoice at the price in effect at the time it was produced rather than the published price in effect on the date of shipment.

Mr. YATES. My question was directed particularly——

Mr. WILMOT. That confuses the thing, complicates it.

Mr. YATES. You brought another factor in here that I did not have in my mind.

Mr. WILMOT. Yes.

Mr. YATES. I was trying to think of this freight factor.

Mr. WILMOT. Yes.

Mr. YATES. This morning Mr. McConnell said that the Government obtains a special consideration——

Mr. WILMOT. Yes.

Mr. YATES. In that freight is subtracted from the published price. The Government buys at a published price apparently, but somewhere along the line, freight is subtracted from the published price at which Reynolds sells to the Government.

Does Alcoa do the same?

Mr. WILMOT. I think he finally clarified that.

Mr. YATES. Not for me, he did not.

Mr. MULTER. Suppose we find out what Alcoa does.

Mr. YATES. What does Alcoa do?

Mr. HICKMAN. May I say the Government, between some locations has a special rate applicable only to its shipments, and it wants to take advantage of that and it does not want to share it with the producers; so we have an arrangement with the Government that whenever they request it—and they request it wherever they have a special rate, in fact—we will rebate to them from this 26 cents price whatever we would have to pay in freight to get the metal from where we produce it to where they want it; and then they pick up the freight charges themselves at their special rate, that is, they do their own shipping, if you please. It is wholly for their benefit. It does result in a net saving to the Government.

Actually it makes no difference to us. If we were asked to ship it from Rockdale to Davenport and it costs us a cent a pound to get it there, we would take that cent off—the Government requests us to do this—we would take that cent off the 26 cents, charge them 25 cents net. They would ship it by their own special deal with the railroads from Rockdale to Davenport, say, at three-quarters of a cent, and they would pocket the extra quarter of a cent. We come out just where we would have had we shipped it for them, but they actually pick up that saving that they get by getting a special freight rate.

Mr. YATES. There is an additional factor, I think, that needs clarification. Your 26 cents price includes an average freight price?

Mr. HICKMAN. Yes.

Mr. YATES. Insofar as the Government is concerned, you deduct the actual freight cost to the point of destination, do you not?

Mr. HICKMAN. Yes, we do.

Mr. YATES. What you are doing then is still charging the Government for an average weighted freight factor in the computation of your final price, less the amounts, so that the Government is actually paying a part of freight there, is it not?

Mr. HICKMAN. The Government can have it either way it wants to. It can get it delivered where it wants it at this average freight price, which is included in the 26 cents, or, if it is in a position to beat that arrangement, if it has got a special rate in effect, it can ask us to turn over to them the actual freight we would pay, and it will pay an actual freight of its own.

Mr. YATES. Yes, but am I right in the assumption that I made, namely, that your price includes a freight factor?

Mr. HICKMAN. Our 26 cents does.

Mr. YATES. And the deduction which the Government makes for actual freight cost is made from that price which includes the freight factor?

Mr. HICKMAN. Yes, sir.

Mr. YATES. All right. Why, then, do you not do what was done in the Ford and General Motors contracts; namely, deduct the actual freight factor from the Government's price before you deduct the actual cost of freight?

Mr. HICKMAN. It could have been done that way.

Mr. YATES. Would not such an arrangement have saved the Government money?

Mr. HICKMAN. I think the Government feels that they have the best deal this way.

Mr. YATES. But that is not my question. Would it not have saved the Government money?

Mr. HICKMAN. No; I do not think so. I think the Government saves more money this way.

Mr. YATES. Why is that, if there is an additional freight factor which is still in the price?

Mr. HICKMAN. Because I think the Government has a selection, which it never makes against itself, either to get this aluminum delivered at what is, in effect, the average price included in the 26 cents, or, if it can better it, it elects to ask for a rebate of actual freight and pay its own actual freight. But it will always come out, if it is as intelligent, as I am sure its operators are, it will always come out either asking us to ship at the average rate, if that is to its advantage, or, if its cost is going to be less than that, it will say, "Let us share it."

Mr. MULTER. Will you yield at that point, Mr. Chairman?

Mr. YATES. Yes; I yield.

Mr. MULTER. As a matter of fact, a large part of the aluminum the Government is stockpiling is being stockpiled in your warehouses; is that not so?

Mr. WILMOT. No.

Mr. HICKMAN. They tell us from time to time it is being stockpiled in various places.

Mr. MULTER. Is any part of it being stockpiled in your warehouses or in your yards?

Mr. WILMOT. No; not in the warehouses. I think there is some stockpiled at our Davenport location, but that Davenport location, Mr. Multer, is a sheet mill. It is not a smelting plant. The pig is actually produced at a smelting plant, wherever that might be—it might be the Northwest, it might be in Texas—and the general theory being that that is a good place to put it. In the event of an emergency, the metal would be available for fabrication into sheet or plate from close proximity.

Mr. MULTER. And there is an actual freight charge incurred, in connection with the stockpiling, in taking it from your plant where it is produced to wherever it is finally stockpiled?

Mr. HICKMAN. In every case.

Mr. WILMOT. It is a lot more logical to do that than it would be to pile it up out in a field somewhere and then have to turn around and ship it to a fabricating plant for conversion into whatever the product might be.

Mr. MULTER. Now, may I return to my original question, which I think is still unanswered. Is there not an incentive, because of the price structure and the manner in which you allow the freight against the price, is there not an incentive to Alcoa and Reynolds and

Kaiser to seek out the purchaser whose plant or point of delivery will be nearest to the place of production?

Mr. WILMOT. I suppose you could answer that yes, but it actually does not work that way. We have carefully computed what the average cost per pound is for this transportation, and, that having been done, it never enters our minds to think that we would save money if we ignored a long haul and concentrated on short hauls. And another factor is that these shipments are made from a multiplicity of points, because we have smelting plants in the Northwest and smelting plants in the South and also in the Northeast. We would, of course, attempt to use our best discretion in order to save on transportation costs.

Mr. HICKMAN. If I might be permitted a supplemental word, sir.

Mr. YATES. You certainly may.

Mr. HICKMAN. The whole postage-stamp theory of delivering anywhere at one price is based on the premise that we are trying to develop a national market. While it is true that you make more if you sell right across the street from your plant than if you ship across the country, actually, if you accept the premise that you have got to develop national markets in order to justify your plants at all, you are just as anxious to sell in California as you are in Pennsylvania, even though you make less money on that particular sale.

Mr. WILMOT. And may I supplement the supplement, also, by saying that it has been traditional for as many years as I can recall that the aluminum system has been one of delivered prices, and there is nothing new about this. It has been accepted.

Mr. YATES. Was that not Mr. Hickman's argument made in the Supreme Court on the Basing Point case?

Mr. WILMOT. I do not know. It might have been.

Mr. MULTER. The difference I see in applying the postage-stamp theory to any business enterprise is that the United States Government has no choice as to who will deliver a letter to be mailed and where it will be delivered after it has the 3-cent stamp affixed to it, whereas in our free-enterprise system, you have a right of choice of customer. I am not finding fault with your exercising the choice of customer, provided it is done fairly and equitably to all concerned, so that you do not pick one customer so that you can earn the larger profit to the detriment of the customer who is farther away. I am not suggesting you do it. I am trying to find out what the fact is.

Mr. WILMOT. Mr. Multer, I can answer this way: We would be delighted to ship several trainloads to any destination in these United States, however remote it might be, at that price.

Mr. YATES. I would like to get back to your statement, to our discussion a few minutes ago, Mr. Hickman, where I asked you whether it would not be cheaper for the Government first to deduct the freight factor, as is done in the hot-metal contracts, and then to deduct the actual freight cost. If we take as our base the contract that Reynolds has with Ford, page 11 of that contract shows that on the 22.5-cents-per-pound price for pig, they have deducted a freight factor of 0.007655. Now, that happens to be 3.1 percent. The Government buys a significant amount of metal, does it not?

Mr. HICKMAN. I grant that is a cheaper way to figure the price, but we are not selling on that basis to General Motors or the Government

or anybody else, speaking for Alcoa. We are selling on a delivered price basis. Now, the only reason we made a special deal with the Government was not that we were trying to give any price concession, but we were trying to enable the Government to take advantage itself of the special arrangement that it had with the railroads; and that is all we were trying to accomplish.

Mr. WILMOT. And no private enterprise enjoyed such an arrangement. It is a purely national arrangement.

Mr. YATES. In other words, this is a deal which only the Government gets?

Mr. WILMOT. That is right.

Mr. YATES. And no other concern gets this deal?

Mr. WILMOT. No.

Mr. HICKMAN. Oh, no.

Mr. WILMOT. No one else has such a favorable transportation arrangement as the Government has. It is a Government bill of lading in which they are accorded these favorable terms not available to anyone else, so far as we know.

Mr. YATES. Does Alcoa ever sell below the published price?

Mr. WILMOT. Let me ask, Mr. Yates, are you dealing with any specific product, are you confining this statement to primary pig?

Mr. YATES. Primary metal.

Mr. WILMOT. To primary pig?

Mr. YATES. Primary metal.

Mr. WILMOT. We do not in the United States. There have been instances where we may have shipped some metal abroad perhaps to a customer of longstanding in a foreign country and there we are obliged of course to adhere to the prices established in that area.

Mr. YATES. When you say "abroad" does this include Canada?

Mr. WILMOT. No; we sell practically nothing in Canada as I recall.

Mr. YATES. England?

Mr. WILMOT. Yes; there would be some in England. There might be some in India something of that sort but it is a trifling amount; it is very small.

Mr. YATES. Do you sell—we are still with primary metal—below your published price to anybody in this country?

Mr. WILMOT. No.

Mr. YATES. Have you ever done it?

Mr. WILMOT. That is a long time. I cannot answer that categorically. I can recall of no instance and certainly not since we have had any Government contracts.

Mr. YATES. The reason for my question I think was the fact that I thought that certainly the Government as perhaps your biggest customer.

Mr. WILMOT. Yes.

Mr. YATES. Should certainly be entitled to the same price as the most favored customer receives.

Mr. WILMOT. We would scarcely allow ourselves to get into that kind of a position.

Mr. YATES. Mr. Wilmot educate me in this respect.

Mr. WILMOT. I am sure that would not be difficult.

Mr. YATES. In this respect. The process of the production of aluminum goes through various stages. It goes through a certain stage

when it is in the form that is usable by Ford and by General Motors as it comes from the Reynolds' smelter or the Reynolds' pipeline. What remains to be done in the manufacturing process to put that in the form of pig to pig it if you will? By that time it has got a certain chemical formula; has it not?

Mr. WILMOT. Mr. Yates that might require some considerable technical discussion in this respect. Principally the product of the smelting pots is pure metal and the purer you have it the better you like it. The alloys used——

Mr. YATES. But at the time it goes into the GM and Ford plants it has its formula established; does it not?

Mr. WILMOT. I really am not in a position to answer that, Mr. Yates, because that is a question as between Reynolds Metals, who supplies the metal, and the automobile people who purchase it. In some instances, you can have certain alloys produced in pots, in the pots themselves. In other instances, you would be a little more likely perhaps to put it through a holding furnace and then add whatever alloying ingredients might be required to meet certain chemical or metallurgical requirements.

Mr. YATES. Would that be done in the Reynolds' plant, or can it be done in either?

Mr. WILMOT. I really do not know how it is done.

Mr. YATES. Could it be done in either?

Mr. WILMOT. Oh, yes; it could be done in either. I do not know I am sure when the gentlemen from the automobile companies are on the stand, they would be able to give you more detailed information in that respect. I really do not know how they do it.

Mr. YATES. With my lack of knowledge of this particular operation, I was under the impression that by the time it flowed from Reynolds into the plants, that it had already had its chemical content fixed, and that all that had to be done was to move it into your various castings or into your various operations.

Mr. WILMOT. I think what I am trying to say to you is that there are all sorts of ways in which this could be done, and I am not familiar with the detailed arrangement, the procedure which they follow.

Mr. YATES. Very well. Does it ordinarily cost Alcoa as much as 10 percent to convert hot metal into pig?

Mr. WILMOT. No; it does not.

Mr. YATES. Would it be revealing one of your cost secrets to ask you what the cost factor was for a process like that?

Mr. WILMOT. I have no figures with me, Mr. Yates.

Mr. YATES. Could you give us a maximum figure?

Mr. WILMOT. There again I think we have to get to the point where there are so many factors that can be included. Mr. McConnell used a great many factors this morning. What you have is merely this. You take the ladle as the metal is syphoned from the smelting furnaces—it moves down usually on a tram rail and it can be poured into molds at the end of that tram rail, in which event you then have pig. The actual pure physical cost of pouring that hot metal into a cold mold is not very great, but I am not going into all of the other factors introduced by Mr. McConnell this morning.

Mr. YATES. Did Alcoa have the opportunity to enter into any hot-metals contracts with any company?

Mr. WILMOT. I would answer that, Mr. Yates, by saying that, of course, there were discussions between the automobile companies and ourselves. We did not ever get to the point where we made a specific and formal offer on hot metal, and we have no hot-metal arrangements with anyone.

Mr. YATES. What effect would such a contract have upon the small independent smelters, the small independent fabricators, diecasters, and so forth?

Mr. WILMOT. First, if you are referring to the diecasting industry principally, I think the hearings held a couple of years ago brought out a statement from the diecasting industry that it was rather traditional with them that they use something of the order of 85 percent of scrap and secondary in their production of diecastings, and to a very considerable extent that has been historically true of permanent mold and sand castings over the years.

Mr. YATES. So what do you conclude from this, that it would have no effect on the diecasting industry?

Mr. WILMOT. Well, it would not have a great effect.

Mr. YATES. What about the smelters who have sold their pig and ingot to the automobile companies?

Mr. WILMOT. There again, Mr. Yates, the source of material for the secondary smelters is obviously scrap, and as the scrap market goes, so goes the price of secondary. If scrap is available in plentiful supply, it has its effect on the price of the scrap and that is quite variable depending on the circumstances existing.

Mr. YATES. I suppose this is an unfair question to ask you?

Mr. WILMOT. At the moment I think it would be discovered that it would be possible for someone to buy secondary metal of suitable composition for many purposes at a price lower than cold pig or hot metal?

Mr. YATES. What about the smelters who sell their pig and ingot to the automobile companies? Under this sort of an arrangement they would be no longer needed, would they?

Mr. WILMOT. I am sure that their answer to you on that would be infinitely better than mine. We are not in the secondary business. We are in the primary business. We do not supply any secondary alloys.

Mr. YATES. Don't you purchase scrap?

Mr. WILMOT. Oh yes; we purchase scrap, but not for the purpose of putting that into ingot.

Mr. YATES. For your own consumption?

Mr. WILMOT. We use a certain amount of scrap in our fabrication. You will recall perhaps that in the testimony I gave before the committee 2 years ago I indicated that it was quite a well-known practice that the individual generating scrap would retain that, identify it, keep it segregated and return that scrap to the individual supplying the product, whether that be sheet or some other fabricated product. In fact, during the war there was a requirement that that be done, in the interest of efficiency.

Mr. YATES. Is it more profitable for Alcoa to sell fabricated products than primary metal?

Mr. WILMOT. Yes.

Mr. YATES. Have there been any cutbacks on Alcoa's production?

Mr. WILMOT. Yes. We have certain contracts, for example, interruptible power contracts in the Northwest, and in those instances, yes,

we have cutbacks, and also at Messina and at Badin we have cut back to some extent.

Mr. YATES. Are these plants that are considered to be part of the so-called new capacity which was the subject of the contracts with GSA?

Mr. WILMOT. I missed something. I missed something in your question.

Mr. YATES. Are these plants that you have listed a portion of the plants that were the subject of the new capacity contracts with GSA?

Mr. WILMOT. No.

Mr. YATES. Would it not have been more advantageous for the Government, in this period of oversupply, to have Alcoa cut back production of new capacity rather than old capacity so that there would be a lesser obligation on the part of the Government?

Mr. WILMOT. It is conceivable that I would think much would depend upon the nature of the operation and the cost of the production at those facilities. We have the right to operate those, and I would assume that we would make a computation indicating that these plants, being the latest ones and the most modern ones, would probably result in the lowest cost of production.

Mr. YATES. As I remember my law, and I am sure Mr. Hickman can correct me if I am wrong, where there are 2 parties to a contract and 1 becomes liable, there is an obligation on the contracting party to whom payment is due to minimize the liability. I wonder whether such a conclusion doesn't exist in this situation?

Mr. HICKMAN. The premise is the obligation to minimize damage, and we do not look on the commitment of the Government to take a pig as a damage, even though their position has changed somewhat, and if I can supplement what Mr. Wilmot said, I think we were well aware of the Government's position, and we had every desire to cooperate with it. We did cut back our purchases of scrap tremendously. We did curtail our production, but we were following the formula of curtailing it wherever we could do it with the least expense, that is in so many places, for example, power, which is the biggest single item in cost we have to pay for whether we use it or not. Now in some places we had power contracts that we could terminate or curtail say on 30 days' notice. We were governed by factors like that. We cut back where we could do it with the least economic loss, and as far back as we could. We finally cut back to this point, where had we cut back any further, the facilities that we are operating now would cost us two-thirds as much shut down as they do operating, which is such an uneconomic thing. That is, we get dressed up with so much overhead, unemployment compensation, and that sort of thing that we cut back to what we considered the bone. When we got to the point where it cost us two-thirds as much shut down as running, we thought it preferable to run.

Mr. YATES. Is Alcoa engaged in either construction by itself or in participation with other companies in the construction of plants in countries other than the United States?

Mr. WILMOT. Engaging with other companies in the construction of plants?

Mr. YATES. For the production of primary aluminum?

Mr. WILMOT. No.

Mr. YATES. Do you still sell at less than the published price to customers outside of the United States?

Mr. WILMOT. There may be an instance here and there where we have had a long association with a company. For example, in India, and there we must adhere to the price in effect in that area or we lose that account, of course.

Mr. YATES. What is the differential?

Mr. WILMOT. Oh, I think it may be a cent or two, something of that sort, but again I would like to say, Mr. Yates, that the quantity that we move out of the country is relatively insignificant, a fraction of 1 percent of the total, and that has been minimized, even that much.

Mr. YATES. Mr. Multer?

Mr. MULTER. Mr. Wilmot, approximately what was your tonnage production in 1955?

Mr. WILMOT. Primary production in 1955 was 1,404 million pounds.

Mr. MULTER. What is it for 1957?

Mr. WILMOT. 1957, according to this latest figure I have here, is 1,423 million pounds.

Mr. MULTER. Approximately the same?

Mr. WILMOT. Approximately the same.

Mr. MULTER. What was your labor increase from 1955 to 1957?

Mr. WILMOT. From 1955 to 1957?

Mr. MULTER. Yes.

Mr. WILMOT. I'd say it would be somewhere around, something on the order of 46 cents per hour, something in that neighborhood. I cannot be exact about it.

Mr. MULTER. You say 46 cents per hour increase?

Mr. WILMOT. That is right.

Mr. MULTER. What is the hourly wage today?

Mr. WILMOT. I do not have that.

Mr. MULTER. Suppose you obtain the figures and submit it to us, what the hourly wage rate was in 1955 and what it is today.

Mr. WILMOT. Yes.

Mr. YATES. And in the cost per pound.

Mr. MULTER. Mr. Yates suggests you might give us the cost per pound of production in 1955 and the cost per pound of production today.

Mr. WILMOT. You mean you want this on purely the labor costs?

Mr. MULTER. Suppose you give us both the labor and the overall costs.

Mr. WILMOT. And the materials and so forth.

Mr. MULTER. Yes.

Mr. HICKMAN. I am reluctant to see us put our costs of making pig on the record, sir.

Mr. YATES. I would be inclined to go along with that if it is all right with Mr. Multer, but I gather from Mr. Wilmot's testimony that the increase was in great measure attributable to the labor factor.

Mr. HICKMAN. We are quite willing to spell out that detail.

Mr. WILMOT. Oh, yes; we can do that, but I do not think we want to disclose all of the factors.

Mr. MULTER. I will not press for the other factors. I thought you were volunteering it. I can understand why you would not want the

entire costs on the record. I think the labor cost will suffice, if you will supply that to us.

Mr. WILMOT. So long as you appreciate, of course, that that is only one of the components of the overall cost, the labor aspect of it.

Mr. MULTER. Of course, somebody picking up this record and reading it next week may put you in a bad light and draw conclusions from it that might be unfair to you, but it is your choice as to whether you will give us the other figures or not.

Mr. WILMOT. I wanted to stipulate that when we do. Let me use an example: A product like aluminum cable, steel reinforced, is made up of aluminum strands, and has a steel core for the strength; obviously as cost increases—labor increases hit the steel industry they are immediately communicated to us and we have to pay more for the steel core that goes into the cable, and so that is another aspect of it.

Mr. MULTER. Mr. Wilmot, I want to be completely fair to you.

Mr. WILMOT. I know you do.

Mr. MULTER. I am directing your attention to the fact that this is a public record as you know and somebody may pick it up at some time later and may draw an unfavorable conclusion from the facts that you do submit for the record. I leave it to you as to how much and how far you will go in what you will give to us in addition to the labor costs.

Mr. WILMOT. All right, we will look at it very carefully and submit the information to you.

Mr. MULTER. As it stands at this moment on the record, it appears that from 1955 to 1957 your cost to the customer of your aluminum is almost 25 percent higher today than it was in 1955.

Mr. WILMOT. Not according to our computation, Mr. Multer.

Mr. MULTER. I may be off by a small percentage.

Mr. WILMOT. Twenty or twenty-one.

Mr. MULTER. 21½ cents in 1955 and 26 cents today.

Mr. WILMOT. Yes.

Mr. MULTER. Isn't that approximately 25 percent?

Mr. WILMOT. I think we figured it at 20.9 percent.

Mr. MULTER. You are figuring the 4½ cents as against today's cost. That is not the increased percentage of price. I take it 4½ cents as against what the price was in 1955 and I say that is the percentage of increased price.

Mr. POWDER. The 20.9 is calculated on the 1955 price.

Mr. WILMOT. I can do a little fast arithmetic here.

Mr. MULTER. Go ahead.

Mr. WILMOT. 4½ on 21½.

Mr. HICKMAN. Less than 21 percent.

Mr. WILMOT. Yes. It is about 20.9 percent.

Mr. MULTER. I will take that. It still strikes me as a rather high increase in percentage of cost during a 2-year period, and frankly, I would like to have you justify, if you can, on the record within the limits that you think you ought to go, that increased cost.

Mr. YATES. Will you yield for a moment?

Mr. MULTER. Surely.

Mr. YATES. I think this is true particularly. In the last hearings, page 262, I notice the statement by Mr. Wilmot:

> Now we are convinced that it is sound, long-range planning to sell new aluminum at a price as low as is feasible in relation to its cost of production.

Mr. WILMOT. That is right.

Mr. YATES (reading):

This has been a policy to which we have been dedicated over these years.

Mr. WILMOT. That is right, and I would say this in answer to you, Mr. Multer. That aluminum is far and away the least expensive of the metals, with the exception of steel, when allowance is made for the difference in the specific gravity. Or in other words, on a volume basis for most of the time aluminum has been a very inexpensive material in relation to the other nonferrous metals.

Mr. MULTER. You may be absolutely correct theoretically, but I know it strikes me as rather high when I get the bill for the putting up of the aluminum screens or the new aluminum door or whatever it is, or the new aluminum appliances that come into the house, and I know those prices are going up and up, and we are paying more for them, and obviously everybody along the line is going to pass on the increased costs plus a fair percentage as increased profit to himself. Now that is the free-enterprise system, but I think we ought to find out how much of that cost is attributable in the first instance to the primary producer.

Mr. WILMOT. I hope you have not had any breakdown of your plumbing in your house in a recent period of time.

Mr. YATES. It is high.

Mr. WILMOT. I do not know how much of that is attributable to the raw material, Mr. Multer, and how much of it is attributable to the artisan who does the job, if artisan you can call him.

Mr. MULTER. I am trying to separate the labor costs from the cost of installation of an item and the cost of production of the item, and I would like to have the record fairly disclose all of those facts. I also have in mind, as I am sure you have, too, and I think you will agree, that today your depreciation and obsolescence allowance is much fairer to you and companies like yours than it was 5 years ago. You have a faster writeoff, you have a choice of a faster writeoff so far as depreciation and obsolescence are concerned.

Mr. WILMOT. Yes, Mr. Multer, but on the other hand the situation we face in the aluminum industry is this: Every time you go to build a new plant in this industry and to put the equipment in it, you find that the cost has tremendously increased, so that your investment is many times what the investment would have been a few years ago, and hence I think our situation is not very different from the situation which has repeatedly been described by the steel people in attempting, in their hearings, to explain that the cost of capital expenditures—that is, for plants and equipment—have tremendously increased. If you are going to keep those in a proper state of repair and replace them, there must be an allowance in your selling price for that purpose.

Mr. MULTER. There is no doubt about that. I also have in mind, though, that when you probably started this venture—you or your company started it—you possibly were required to depreciate your plant and initial capital investment in plant over a period of 50 years, at the rate of about 2 percent a year for obsolescence and depreciation. I think in some instances today you have been able to do it over 5 years and I think you have got a choice of doing it, even if you did not get

any special tax concession when you started many of your newer plants, you still can write it off in a maximum of 10 years.

Mr. WILMOT. May I merely say this: That we recognize that the aluminum industry has a tremendous job in the period just ahead to absorb the great increases in capacity, and certainly the industry is not going to put a higher price on its product than is required to make a fair and reasonable return on its investment. To do anything else would be foolhardy in our opinion, and it has not been our practice, as the record, I am sure, will show.

Mr MULTER. Yet with more customers today than you had in 1955, the price has gone up.

Mr. WILMOT. Yes, because the costs have gone up.

Mr. MULTER. Has the tonnage that has been sold gone up, too?

Mr. WILMOT. I read to you what the production was.

Mr. MULTER. Yes, you gave me the production. Now I am wondering about the sales.

Mr. WILMOT. The sales have not gone up, unfortunately. You are quite familiar, I am sure, with the rather skittish situation which has existed here in the general economy of late.

Mr. MULTER. We always are told in these various committee hearings that if demand exceeds the supply the price must go up. If supply exceeds the demand the price should go down. Obviously today demand is under supply. Why isn't the price going down?

Mr. WILMOT. You are on one of my favorite topics at this point, Mr. Multer. The price of aluminum did not go up at a time when it might well have done so in relation to the sky-rocketing prices of many other materials. Just to satisfy a little curiosity, I asked one of our statisticians to determine where the price of aluminum would have gone had it followed the trend of the other metals, and the price of aluminum today, instead of being 26 by that yardstick, would be 52, and if you were to trace that with copper it would have gone up at the peak to something like 68, so if we, to get on another committee hearing, were to be accused of administered prices, I think we would admit it and feel quite proud of the record that we had established.

Mr. MULTER. I would prefer—instead of using the term "administered prices," I would prefer to say that your economists and the actual operation of your company and the other companies in the same field have very clearly demonstrated that they can repeal the law of supply and demand.

Mr. WILMOT. Let's say that all we are trying to do is to make aluminum available at the lowest feasible price so that the shareholders obtain a reasonable return on their investment and still make the price attractive enough that we can expand these markets and absorb the great increase in capacity which is now being brought into being.

Mr. MULTER. Obviously you are firmly convinced that with supply being in excess of demand, you could not get a fair return by cutting your price so as to move out your supply and create a greater demand.

Mr. WILMOT. I do not believe that you would accelerate the demand.

Mr. MULTER. You do not think a cut in price would accelerate the demand?

Mr. WILMOT. As I said here a little while ago, the price of aluminum in relation to competitive materials is at such a point that it is ad-

vantageous at its present level for the buyer to use aluminum. Nothing is gained by a bargain sale, which is not justified by our costs.

Mr. MULTER. What do you estimate the selling price should be of that aluminum house you referred to out here in Arlington, Va.?

Mr. WILMOT. Between you and me I hate to ask what the price of that house is. I suspect that the people who would like to live in that house cannot afford it and the people who could afford it might want a different design; I do not know. I suspect that it is a lot higher than I would want to pay for it.

Mr. MULTER. Then you have already answered the next question: By cutting price it will not increase the demand for that kind of a house, it will not put it in competition with the houses being built today.

Mr. WILMOT. I hope the prospective buyer will not attribute the price of that house to the use of aluminum. There are other things which enter into the costs of a house than the price of some of the materials.

Mr. MULTER. Then we can tell the masons and the——

Mr. WILMOT. I have no idea what price tag they put on it. As I said before, I would probably feel more comfortable if I do not learn. But if someone says to you that you cannot afford to use aluminum in a house, I hope you will disabuse him of that belief, because we firmly believe that there are many applications of aluminum for housing that are well justified.

Mr. MULTER. But you are not prepared to try to justify it in the building of an entire new home?

Mr. WILMOT. We have gone overboard on this, of course, and there are some uses in there that the average individual would not think of. It is a promotional idea and you take out those items that will not stand up when you subject them to a close economic scrutiny.

Mr. MULTER. But for some time to come we will have to satisfy ourselves by living either in a frame house or a brick house. Thank you, Mr. Chairman.

Mr. YATES. Mr. Riehlman.

Mr. RIEHLMAN. I have no questions.

Mr. YATES. Mr. Dalmas.

Mr. DALMAS. No questions.

Mr. YATES. Mr. Maness?

Mr. MANESS. No questions.

Mr. YATES. Thank you, Mr. Wilmot, Mr. Hickman, and staff.

Mr. WILMOT. Thank you, gentlemen.

Mr. YATES. Mr. Rhoades.

Mr. Rhoades, the committee is pleased to have you appearing before it again. We remember very well your excellent testimony the last time you appeared before our committee and we look with anticipation to your present statement.

TESTIMONY OF D. A. RHOADES, VICE PRESIDENT AND GENERAL MANAGER, KAISER ALUMINUM & CHEMICAL CORP., ACCOMPANIED BY CHAD F. CALHOUN, VICE PRESIDENT

Mr. RHOADES. My name is D. A. Rhoades. I am vice president and general manager of Kaiser Aluminum & Chemical Corp., a major

integrated producer of primary aluminum and fabricated aluminum products since 1946. Kaiser Aluminum has its general offices in Oakland, Calif., and presently has approximately 21,000 employees, 23,000 stockholders, and 24 manufacturing plants located throughout the country.

In the letter of October 26 from the committee chairman to Mr. Edgar F. Kaiser, president of Kaiser Industries Corp., it was requested that information be submitted to the committee on two matters: the future of the aluminum industry and the position of small business in that future. In the short period of time since receipt of that letter, we have gathered information on these two matters which will provide the committee with a complete and accurate statement.

Before presenting this information, which consists for the most part of specific detail, I would like to take a few moments to express our broad, general views as to the long-term future of the aluminum industry and the role of small business in that future. These views constitute what may be termed "our management approach to the long-range planning that is essential to the growth of our company and the industry." They also have a substantial influence on the day-to-day decisions which combine to form our overall company policy.

In our estimation, the future of the aluminum industry over the next several years will parallel its rapid expansion in the 11 years since World War II, but on a vastly larger scale. Aluminum is a relatively new and almost universally useful basic metal which, in a very few years, has already overtaken many metals which have been used for literally hundreds and thousands of years. Because of its wide applications, both real and potential, we believe that aluminum is on the threshold of its greatest era of growth.

In preparation for this growth, we at Kaiser Aluminum are at this moment pushing toward completion our largest expansion to date, a $400-million program affecting every phase of our production—from raw materials to fabricated products.

Furthermore, we are expanding our productive capacity in a period during which many business observers, looking at a surplus of metal over and above today's immediate requirements, ask the question, Why are we still expanding? We are expanding because we have confidence in aluminum's growth.

To translate that confidence into figures, may I present some brief estimates of our company's market research department on the growth of the Nation's aluminum market over the next few years.

The total consumption of aluminum in the United States for 1957, the current year, is estimated at slightly under 4 billion pounds. By 1965, we estimate that this figure will more than double—that the total consumption will be 8.4 billion pounds.

Of this 8.4 billion figure, our market researchers predict that the largest single users of aluminum in 1965 will be the building industry, 1.6 billion pounds; the electrical industry, 1.4 billion; and the transportation industry, 1.3 billion pounds. Included in the transportation category is the automotive industry, which is currently using about 45 pounds of aluminum in each passenger car. By 1965, we conservatively estimate this usage to increase to something in the neighborhood of 95 pounds.

We also foresee tremendous growth in the applications of aluminum in the field of consumer durable goods, presently taking about a half-billion pounds, and in the container and packaging industry. Led by significant new developments in aluminum cans, the container and packaging market is expected to more than double by 1965.

Obviously, aluminum's bright future is one that can and will be shared by producers, distributors, fabricators—everyone in the industry. And its beneficial effects on small business will, we believe, be particularly apparent. For the history of our industry indicates that any broad expansion in the applications of aluminum, coupled with an abundant supply of metal, provide an infinite number of opportunities for the small fabricator to produce new and useful products.

Our conviction that the small fabricator will have a large stake in the future is also based on the increasing emphasis within the industry on improving and expanding services to the small fabricator. Our company, and I am sure we are not alone in this, provides a number of services which I shall discuss in some detail later on. Let me merely point out here that these services are assisting the small fabricator in obtaining adequate and dependable supplies of metal, in increasing his productive efficiency, reducing his production costs, and in creating a broader market for his products.

Regardless of temporary fluctuations in the general business climate, then, we believe that over the next several years the aluminum industry will undergo its greatest period of growth and that small business will play an increasingly important role in that growth.

Now, then, let us turn to the detailed information which has been gathered in response to the committee's request. First, a word about present productive capacities.

As of June 30, 1957, according to accepted trade sources, the primary aluminum capacity of the United States was 1,775,000 tons. Upon completion of announced expansion plans, capacity will be 2,575,000 tons, divided among 6 producers.

Our own company, as of June 30, had a capacity of 434,500 tons of primary metal, represented by 3 reduction plants, including the Nation's largest aluminum smelter at Chalmette, La. We recently have added 27,500 tons of capacity at Chalmette, and are bringing in an additional 145,000 tons at our new reduction plant at Ravenswood, W. Va. These 2 additions constitute an expansion of about 40 percent of existing capacity.

On the demand side of the picture, most industry observers predict an increase in demand from the present figure of slightly less than 2 million tons to a figure of approximately 3 million tons in 1960.

It is also generally predicted, again looking ahead through 1960, that the supply of aluminum will be equal to, or at times exceed the demand. In other words, a condition of availability is likely to continue for the next 3 years.

It is interesting to compare this situation with the conditions which prevailed at the time of my last appearance before this committee. At that time the spectacular growth in aluminum usage had caused demand to outstrip supply and the industry did not have enough aluminum to go around. Since then, the vast expansion programs of old and new producers have greatly increased capacity and removed the threat of a short-supply check on the growth of the industry.

I would like to be a bit more specific about the role of small business in the aluminum industry. This is a question which concerned us long before Mr. Kaiser received your chairman's letter, for the very practical reason that the health of small business is our bread and butter.

To illustrate this point, allow me to quote a few of our recent sales figures.

First, however, I should point out that ordinarily there is no business reason for maintaining centralized, up-to-date records on the size of our customers. We did not have readily available the identification of all our many thousands of customers as small or big business.

We do, however, have available for our internal use information on major accounts, which we define as accounts purchasing more than 1,500,000 pounds of metal annually. I believe we can assume that the great majority of our customers buying less than this amount of metal are small business.

Accounts of less than the above amount represent 97.1 percent of our commercial business by number of accounts and 42.9 percent of our business by weight of metal. Of the remaining 57.1 percent by weight, some 8.4 percent is sold through distributors. Most buyers from distributors are small businesses who by the nature of their operations do not buy the quantities required for mill purchases.

This leaves 48.7 percent by weight sold through major accounts. We examined our records on each of these customers and concluded that over one-third of them, representing 12.8 percent of our commercial metal sales, had less than 500 employees and thus could be defined as small business. We concluded, therefore, that only 35.9 percent of our sales by weight could be attributed to businesses with over 500 employees.

These figures indicate quite clearly that if we were to concentrate our sales efforts solely on our so-called big customers, we would lose a very substantial portion of our business.

We believe the aluminum industry offers considerable opportunity to small business because of the low investment required and the quick results obtained by initiative and hard work. To be sure, some areas within the industry, such as large-scale reduction operations, are necessarily foreclosed to small business. But there are several broad fields in which a modest investment in plant, equipment, and labor can lead to the establishment of a successful small business.

Our company's experience in the sale of sheet provides a significant example. About 50 percent of our sales of sheet products are represented by about 5 percent of our sheet accounts. The remaining 95 percent of our accounts consist of several thousand smaller users of sheet. Last year, about 70 percent of our orders were for 5,000 pounds or less and 37 percent were for 2,000 pounds or less.

From our knowledge of the business, we feel there is a good correlation between the amount of purchases and by a buyer and the size of his business; hence, it is apparent that small business has been able to maintain a strong position in the business of fabricating or otherwise utilizing our sheet production.

An illustration of the many opportunities open to small business in the further fabrication of sheet is provided by the manufacture of residential and commercial awnings. It is estimated in the trade that about 150 manufacturers participate in this field, with an annual usage

of from 35 million to 40 million pounds of sheet. The great majority of these manufacturers may be classified as small business—a typical manufacturers has only 10 employees and, aside from the building, the investment required to enter the business is estimated at about $30,000.

In addition to these present and potential customers of sheet producers, either by direct mill purchases or from distributors, there are an estimated 350 additional businesses, most of whom are small in size, buying parts from aluminum fabricators and assembling awnings.

We do not manufacture awnings, but have vigorously competed for a share of the aluminum consumed in the awning market, whether through direct sales, distributor sales, or sales to parts fabricators. The success of small business in this field has been reflected in our own sales.

In reviewing the figures developed by our company in response to the request of the chairman, my initial reaction was that while it was apparent that small business now played an important part in the industry, there was another important question to answer: What, specifically, is Kaiser Aluminum doing to help its small-business customers increase their participation within the industry? I am sure you will be interested in a brief summary of what we are doing in that respect:

1. We noted, for example, that small business has at times been deterred from participating in the industry because of the fear of recurring shortages of metal. We have done our best to protect our customers against this problem. First, we have greatly expanded our productive capacity, as previously explained. Second, we have adopted a policy of offering long-term supply contracts to those who wish to enter into such arrangements. Third, we have protected our historical customers by continuing to supply metal in times of shortage and not merely accepting orders in times of ample supply.

2. Small business usually does not have the staff for national advertising. On our nationwide television program we currently allocate time between promotion of products made by our customers and our own products at a 5-to-2 ratio. In our program this fall, for example, we have devoted considerable commercial time to products manufactured by small business, such as storm windows and doors, mobile homes, kitchen utensils, and foil packaging. To complement television, we provide promotional literature or sales aids free of charge to our customers. These are distributed within their sales organizations to provide a coordinated tie-in with our television commercial.

3. Small business usually cannot support extensive industrial engineering services. Our field engineering staff renders valuable day-to-day service to small fabricators. Our engineers, located throughout the Nation, assist fabricators in solving production problems by giving, without charge, advice concerning proper alloys and tempers, drawing and forming methods, tooling design and lubricants, welding methods, and finishing techniques. As another form of assistance to small business, we have published a series of technical books which we make available without charge to our customers. Samples of these have been brought to the hearing and are available for your examination.

4. Small business does not usually employ an industrial designer. We maintain an industrial design staff to consult with our customers

and potential users of aluminum. We encourage the entire industrial design field to call upon us for assistance and consultation on any matter pertaining to design where aluminum is a vital factor. We work with aluminum manufacturers or fabricators, those who desire to make an aluminum product or those who have a special application of aluminum.

5. Small business usually does not maintain an extensive research and development program. Our research staff assists small manufacturers to expand their business by developing new products and processes for direct manufacturing use and by developing new alloys to improve the quality of consumer products. We also provide data concerning aluminum and aluminum products which the small manufacturer could not obtain without considerable expense.

The committee may be interested in a few examples of our research activities. Many small manufacturers produce consumer products which depend on anodizing or other surface finishing, or they may subcontract for the application of surface finishes on products of larger manufacturers. We are actively engaged in the development of alloys and processes for anodizing and other surface finishes, which will result in a substantial market expansion for aluminum products ordinarily manufactured by small businesses.

Again, many small businesses manufacture products involving the joining of metal parts or they perform welding or other joining operations on a subcontract basis. We are actively engaged in the development of processes for improved weld quality at lower cost and for improved soldering techniques. These processes frequently result in a major increase in aluminum markets.

6. Small business cannot by itself make the major effort necessary to develop new uses for aluminum. We have spent years devoting sales, research, and engineering efforts to further the use of aluminum in fields such as the automotive, boat, architectural, and marine industries. We do this for the selfish reason that we thereby sell more aluminum—but a great part of these sales are not directly to the using industries but to our small-business customers who do the fabrication and, in turn, make the sales.

In view of the committee's interest in the automotive industry, I would like to illustrate the above points by taking a look at our efforts in the automotive field.

A recent survey by Kaiser Aluminum shows that the average car in 1958 will use 44.9 pounds of aluminum, as contrasted to 39.6 pounds in 1957. It is variously estimated that long-range potential usage will be somewhere between 300–400 pounds per car. If we multiply this by a production of from 6 to 8 million automobiles annually, you will realize why this industry has always commanded our attention.

The above figures of potential usage include up to about 40 pounds in the engine block, which probably could be cast only in an operation involving a large investment, and a portion of the remaining figure would be manufactured through large-scale casting or sheet-stamping operations not readily available to a small operator. Other than such manufacturing processes, we believe that aluminum parts for automobiles could be manufactured or assembled by small business, so that a major aluminum market is being opened for their benefit.

To help the aluminum industry sell more metal to the automotive industry, our manager of automotive sales and his staff have been in

constant contact with the industry, exploring uses for aluminum and promoting the use of aluminum in automotive design. We have maintained a general promotional effort throughout the industry's various styling and engineering divisions to place before them information on the availabilities, properties, and variations of finish provided by the products of our company and its customers. We have given engineering assistance to the automotive industry on projects involving the use of aluminum. Our participation in the introduction of the die-cast engine block and integral cast wheel-hub and drum are outstanding examples of our efforts.

As an illustration of our promotional activities, we have placed on your desk copies of our brochure, Imagination in Aluminum, recently prepared for the automobile show in Detroit. Material such as this may not be of immediate benefit, but we feel that over the long run it will help to expand the use of aluminum, which will be in the interest of both our company and its customers.

To help our customers sell in the automotive industry, we keep in close contact with the fabricated parts purchasing departments of the various automotive companies. We thus acquire considerable information respecting sales opportunities. This information is forwarded to our local sales offices which, in turn, notify customers or potential customers of market openings. We thereby provide a valuable service to our customers and at the same time try to assure our proper participation through such customers in the total metal requirements of the industry.

We also help customers and potential customers by submitting designs to them for quotation of prices to the automobile manufacturers; by recommending alloys, design changes, and tooling for parts manufacture, and by providing technical assistance with respect to fabricating and finishing processes.

In conclusion, may I reiterate our firm conviction that aluminum consumption will remain high and even exceed its growth pattern of the past few years. This conviction is based upon aluminum's unique characteristics, the technical advantages in its production, and the economic savings to be derived from its use.

We also believe that small business presently plays a vital role in the progress of the aluminum industry. Furthermore, there is every reason to believe that its participation will increase with the expansion of the industry. Certainly the efforts of Kaiser Aluminum are directed to that purpose.

Mr. YATES. That is a fine statement, Mr. Rhoades, and we are grateful to you for giving the committee the benefit of your thinking.

I respect your statements about the small-business man, but I must confess that I am not quite as optimistic as you are. Do you not see the small-business man in the aluminum industry getting a smaller and smaller share of the market? Are not the large nonintegrated users receiving a greater share from the primary producers?

Mr. RHOADES. I do not think so. I have no specific figures with respect to the increase in the number of firms that could be considered as small business, but certainly our sales of aluminum in pig, ingot, and billet over the past few years have increased tremendously.

I have got some figures here that I had racked up after attending the meeting this morning, and starting with the year 1954 our sales of

pig, ingot, and billet to the nonintegrated producer was 136 million pounds.

In 1955 it was 262 million pounds.

In 1956 it was 324 million pounds.

And the first 9 months of this year it is 220 million pounds.

Mr. YATES. I do not suppose your figures would indicate a breakdown on the same basis as you made in your direct statement, namely on the basis of sales to those who use, I think it was 1,500,000 pounds annually?

Mr. RHOADES. No.

Mr. YATES. So that for the purposes of your figures the nonintegrated user might be a company as large as Bohn Aluminum or Ford or one of the others?

Mr. RHOADES. That is correct.

Mr. YATES. Do you sell to General Motors, Ford, or Chrysler?

Mr. RHOADES. Yes, we sell General Motors, pig, and I am not sure whether we sell Ford or Chrysler any, but we have a contract with General Motors.

Mr. YATES. For purposes of the figures you have just given the committee, a nonintegrated user would include such companies as General Motors?

Mr. RHOADES. That is correct.

Mr. YATES. Incidentally, I looked through your very fine brochure here and congratulate you upon these spaceship-design concepts. They are very dramatic and very pleasing.

Mr. RHOADES. Thank you, very much.

Mr. YATES. Mr. Multer suggests that a full-size sample would be more pleasing, and I am sure that you would agree with this point, too.

Your company recently undertook to amend your basic contracts with the Government. Were the reasons that impelled this decision on your part primarily the same as were testified to by Mr. Hickman for Alcoa?

Mr. RHOADES. Yes.

Mr. YATES. Do you have same feeling that he expressed about the use of scrap in the computation of the liability to the Government?

Mr. RHOADES. I think I do. They are both sources of additional aluminum, where it is purchased in the form of pig or you purchase it in the form of scrap. However, as was pointed out, insofar as scrap is concerned, that was the situation that existed at the time the contracts were made.

Mr. YATES. This was true with respect to your imports, too, though, was it not?

Mr. RHOADES. I am not quite clear on that, whether we were actually importing as much as we subsequently did, but I am sure that had the question of purchases from outside the country been brought up at the time, that the Government would then have been heartily in favor of purchasing outside of the country, because at that particular time there was a tremendous shortage of aluminum, and they would have pinned a medal on us if they had been asked to evaluate our actions at that time.

Later, we were reprimanded to some extent, or penalized to some extent as a result of having made these long-term contracts.

Mr. YATES. Does your company sell primary metal—at less than its published price?

Mr. RHOADES. Not to my knowledge.

Mr. YATES. Have you ever heard of such instances?

Mr. RHOADES. I have heard of quoting on some export orders that we did not get that were slightly under the domestic price. However, it evidently was over the competitive price in the particular country that we were bidding, a very insignificant amount. We do very little export.

Mr. YATES. If, as a matter of fact, such sales are taking place, would you not feel that the Government is entitled to the lesser price, too? Let me put it this way: Is not the Government entitled to the same treatment as your most favored customer?

Mr. RHOADES. I think the Government is entitled to whatever is contained in the contract that we made with them with respect to this plant expansion. I think that their price of metal is the market price or the published price, and I should think that they should be entitled to the same price as we are selling others.

Mr. YATES. Is there a distinction in your mind between market price and published price?

Mr. RHOADES. I listened to that this morning, and, to me, there does not seem to be. Market price and published price seem to be synonymous, at least in my mind. Technically, there may be some difference, but to me it means the same thing.

Mr. YATES. Has there ever been any variation that you know of between published price and price for which primary aluminum was sold?

Mr. RHOADES. Not in my mind.

Mr. YATES. You do not know of any?

Mr. RHOADES. I do not know of any.

Mr. YATES. Kaiser, too, increased its price on primary aluminum since our hearings 2 years ago, from 21½ cents to 26 cents, did it not?

Mr. RHOADES. Yes. We increased our price August 2, 1955—and, in reading the testimony, I understand that there was a hearing in September—so, if this committee had meetings extended into September, the price at that time was 22½ cents, but in January it was 21½ cents.

Mr. YATES. Perhaps that explains the discrepancy between Mr. McConnell's statement and mine.

Mr. RHOADES. So, they are both right. Yes; we have increased our price. Our price today is 26 cents a pound.

Mr. YATES. Have the prices for your fabricated and semifabricated forms been increased by the same percentage as the increase for primary metal?

Mr. RHOADES. Well, I would say, generally, yes. Now, there may be specific variations. Our last increase in pig was from 25 to 26 cents. That is exactly 5-percent increase, and other fabricated aluminum products probably range from 4 to 5 percent, but in the general vicinity of the 4 percent that was raised on the pig price. There are exceptions, 2 or 3, where you get a higher or, possibly, lower percentage in a particular case.

Mr. YATES. Are you operating at 100 percent of capacity?

Mr. RHOADES. Yes; our reduction facilities are operating at 100 percent of capacity.

Mr. YATES. Counsel points out to me that you asked that you be given the opportunity to obtain a consent from your financial institu-

tions in connection with the approval of the amendments to the basic contract with General Services Administration.

Mr. RHOADES. Yes.

Mr. YATES. Have those been obtained?

Mr. RHOADES. Yes; we obtained those.

Mr. YATES. Have you tried to get any company to go into a hot-metal contract?

Mr. RHOADES. We have had discussions over the past years with automotive people.

Mr. YATES. What is your view on this? Is this a new development for the future in the industry? I should have asked Mr. Wilmot this same question, as to what he contemplates, what he sees for the future. Is this something that will take place more and more where private industry, private companies will build a plant right alongside of your producing plant so that you can supply them with hot metal?

Mr. RHOADES. That is a very difficult question to answer. I think a situation such as that will only come about when there is a very large manufacturer who can take the metal in large quantities continuously and has relatively large casting facilities. I think the terms of the Reynolds contract are such that they have to take it on a 4,000-pound ladle and so much a day, quite large quantities per day.

Mr. YATES. Do you not foresee this happening with other industries?

Mr. RHOADES. It could. I think it could. It is possible it would happen with large diecasters or extruders who have a large requirement for metal.

Mr. YATES. Suppose we increased our defense effort; could it happen? I suppose not. Does the aluminum industry make the coverings for missiles, just as they make wings and fuselages for airplanes?

Mr. RHOADES. We do not make any parts ourselves.

Mr. YATES. If Mr. Khrushchev was right that the world is moving away from manned aircraft, you will have to find a new market to replace the airplane industry, will you not?

Mr. RHOADES. I believe that there is a considerable amount of aluminum used in these missiles. There is quite a cloak of secrecy around that. We do not have access to all the information, but there are evidently large quantities of aluminum being used in the missile program.

Mr. YATES. What about the threat of imports? Does that exist at the present time, do you think?

Mr. RHOADES. There is a little metal coming into this country; I mean in the form of sheet and fabricated products.

Mr. YATES. You import from Aluminium, do you not?

Mr. RHOADES. Oh, yes.

Mr. YATES. And Alcoa imports from Aluminium, too?

Mr. RHOADES. Yes.

Mr. YATES. Does Aluminium have its own customers in this country?

Mr. RHOADES. According to our sales department, they do.

Mr. YATES. You have no reason to doubt your sales department?

Mr. RHOADES. No doubt.

Mr. YATES. How about your own company? Do you export aluminum?

Mr. RHOADES. Very, very little; less than 1 percent in all forms.

Mr. YATES. We received word that production capacity is increasing in Europe and there is a group that is forming to build an aluminum plant in Africa. Are you participating in any of those ventures?

Mr. RHOADES. Not actively. We have talked to some of those groups, but not seriously as yet. We like to follow the developments in those areas, primarily for the availabilities of bauxite as a possible source.

Mr. YATES. When you fabricate—let us take an extrusion, for example—do you use molten metal or do you reheat pig? Or do you do both?

Mr. RHOADES. We use molten metal out of the pot to cast billet. We do that in our reduction plants, although we have casting facilities, that is, billet casting facilities at our extrusion plants, so we can either ship in pig and remelt the pig and cast billets at the extrusion plant, or we can, at our reduction plant, cast billets and ship the billets into the extrusion plant. We have two methods there.

Mr. YATES. Do you sell your aluminum under the same type of a freight pricing policy as the other two companies?

Mr. RHOADES. I think so. We sell aluminum on a delivered-price basis. In other words, our price is 26 cents a pound in New York or California, regardless of the freight rate that was involved in getting it to that location.

I guess there is a slight exception in connection with the sales to the Government. The sales to the Government are at 26 cents a pound, and we deduct from that 26 cents what it would cost us to ship it to the particular location, including the transportation tax, and we bill them for that.

Mr. YATES. You do not deduct your average freight factor?

Mr. RHOADES. No, we deduct the actual freight that it would cost us to ship it from our plant to their warehouse, and also deduct the transportation tax. We send them a bill for that. They give us a Government bill of lading and then they pay the freight on the Government bill of lading.

Mr. YATES. Does it cost Kaiser as much as 10 percent to pig molten metal, to convert molten metal into pig?

Mr. RHOADES. Ten percent of what?

Mr. YATES. Of the published price.

Mr. RHOADES. Of the published price? No, I do not think it costs that much.

Mr. YATES. What is the maximum amount do you think it would cost Kaiser to do that?

Mr. RHOADES. I would not like to say. I am sure it would not be 10 percent of 25 or 26 cents. That is a relatively simple operation, but when you have to alloy——

Mr. YATES. What is involved in that? What is involved in pigging molten metal?

Mr. RHOADES. Well, you tap the potline. You go along there with a ladle and siphon the molten metal out of the pot into the ladle. That is taken down to the end of the line and you have molds, thousand-pound pig molds, and the ladle is tipped up to pour into these molds, molten aluminum. The top is skimmed off a little bit and you keep on going until you empty your ladle.

Mr. YATES. Is the chemical composition of the molten metal fixed before it goes in—at the time that it is ready to go into the molds?

Mr. RHOADES. Normally, we produce high purity aluminum in the cells. We do, however, produce some copper alloys in the cells, but normally where you would have a copper or a silicon alloy, the molten metal would be taken to a holding furnace and you do your alloying in the holding furnace.

Mr. MULTER. Will you yield at that point?

Mr. YATES. Yes.

Mr. MULTER. After the molten metal is poured into the molds, it is then allowed to chill and harden naturally?

Mr. RHOADES. That is right.

Mr. MULTER. There is nothing added to the process but the circulation of the air?

Mr. RHOADES. That is right.

Mr. MULTER. Is it allowed to stand until it is chilled and hardened?

Mr. RHOADES. That is correct.

Mr. MULTER. Thank you, Mr. Chairman.

Mr. YATES. I think that is all I have, Mr. Multer.

Mr. MULTER. Tell me, who publishes the price for the primary aluminum?

Mr. RHOADES. We publish our price.

Mr. MULTER. And Alcoa publishes theirs?

Mr. RHOADES. I presume so.

Mr. MULTER. And Reynolds does the same?

Mr. RHOADES. Yes.

Mr. MULTER. And then they all find their way into the trade publications and the trade publications then broadcast it to the trade?

Mr. RHOADES. Well, we publish our prices and mail it to our customers or newspapers or anyone else. It is a matter of public information.

Mr. MULTER. I think you are very proud of the efficiency of your operation.

Mr. RHOADES. Yes, sir.

Mr. MULTER. I notice that you have three plants in operation now that are primary producers or are producers of primary aluminum.

Mr. RHOADES. Yes.

Mr. MULTER. At each of 2, you produce more primary aluminum than is produced in any of the 7 plants now in production by Alcoa and more than any of the plants that are now in production—there are 6 of them—in production by Reynolds.

Is it a fair assumption that the greater quantity that you can produce in a single plant is a less costly operation? In other words, let me make myself clear.

Mr. YATES. You are clear.

Mr. MULTER. You at one plant produce 220,000 short tons. Alcoa produces in one plant 108,000 short tons. Reynolds produces in one plant 109,000 short tons. Would you say that your production of 220,000 in your plant is a more efficient and more economical operation?

Mr. RHOADES. I think on the lower side, that is the smaller plants, where you require relatively a higher overhead—you have to have your various departments and they have to be charged off against lower production—the costs in those plants are generally higher. And I am speaking for our own plants, because we have a plant at

Tacoma with a capacity of about 72 million pounds, and we have the Chalmette plant where it is well over 400 million pounds. But after you get to a certain size, there is very little efficiency that can be accomplished by having a larger plant. The size of these plants to a large extent is controlled by the availability of power in the particular area.

Mr. MULTER. Is the labor wage scale the same throughout the country in all of the plants at each of the three companies, Alcoa, Reynolds, and your own?

Mr. RHOADES. I cannot speak for them, but we do have some variation within our own plants for the same operations, because we do not have similar unions, and there may be a slight variation in the labor scale.

Mr. MULTER. Does raw material cost you approximately the same, the three companies?

Mr. RHOADES. I do not know what you mean by "raw material." Power varies considerably from one area to another. Power costs in the Northwest are rather low, but when you take into consideration the location of the market and add your freight to it, your final cost to the ultimate consumer is higher.

Mr. MULTER. What about the cost of the bauxite?

Mr. RHOADES. Well, we have our own bauxite mines in Jamaica and also purchase some bauxite. Our bauxite is converted to alumina at Baton Rouge, La., we have only the one plant at the present time, although we are just completing an additional alumina plant at Gramercy, some 30 miles south of Baton Rouge, so all of our alumina comes from a single plant.

However, the freight rate from that plant to the reduction plants varies considerably, depending upon the proximity of our reduction facility to our alumina plant.

Mr. MULTER. Is there any great variance in the cost of the alumina to each of the three companies?

Mr. RHOADES. The what?

Mr. MULTER. Any differential in the cost of the alumina to each of the three companies?

Mr. RHOADES. You are just asking me for an opinion now?

Mr. MULTER. Yes.

Mr. RHOADES. I do not think there is a great deal of difference in costs. I remember some years ago some information was given to the Government with respect to alumina costs, and at that time I think Reynolds Metals had the lowest alumina costs, and I think that could be attributable to the fact that they were using at the Hurricane Creek alumina plant large quantities of domestic ore. In other words, they had no freight involved so, at that particular time, as I recall it, Reynolds had a slightly better cost than either Alcoa or ourselves.

Mr. MULTER. Is Reynolds' labor cost approximately the same as Kaiser's?

Mr. RHOADES. I should say it would be for plants in similar locations. Where we have plants in the South, as they do, I think labor costs are about the same.

Mr. MULTER. I noticed that for 1956 your total production of primary aluminum is approximately 434,000 short tons.

Mr. RHOADES. That is right.

Mr. MULTER. Were you able to sell all you produced?

Mr. RHOADES. Yes.

Mr. MULTER. Does that include what you sold to the Government?

Mr. RHOADES. Yes.

Mr. MULTER. Did you sell the Government in 1957 any more than you sold them in 1956 or in 1955?

Mr. RHOADES. I do not have the exact figures on that, but I think we sold them more in 1957 than we did in 1956. I know that we put more in 1957, but the Government took metal from us in 1956. I think the supply to the Government was greater in 1957.

Mr. MULTER. Is it fair to say that if we exclude the purchase by the United States Government, the demand by your customers fell off in 1957?

Mr. RHOADES. As compared to 1956?

Mr. MULTER. Yes.

Mr. RHOADES. I should say "Yes."

Mr. MULTER. I would like to have some explanation, if there is any, as to why the published price of Alcoa and Reynolds and Kaiser is 26 cents, exactly the same per pound for the 3 companies.

Mr. RHOADES. I can only speak for Kaiser Aluminum, and our price is 26 cents because, as a result of our increased costs on the previous raise in price, we felt we were entitled to increase the price of primary aluminum a cent a pound, that is, increased labor costs, transportation costs, materials costs, and so forth.

Mr. MULTER. Will you give us—and you do not have to do it now, but supply it to the committee—the cost of your labor in 1955 and in 1957, per pound and per hour, wage rates per hour and your labor costs per pound?

(This material appears in the appendix, pp. 436–437.)

Mr. RHOADES. I do not like to disclose to my competitors what my cost of labor per pound of aluminum is. I will be very happy to give you the change in the rate per hour, what we pay for labor, if that would be satisfactory. This is a very competitive business.

Mr. MULTER. That is just what I am driving at. It is a very competitive business, and the price to your customer is precisely the same as it is to Alcoa's customer and precisely the same as it is to Reynolds' customer. Where is the competition? Is it profitwise for the three companies?

Mr. RHOADES. Pardon?

Mr. MULTER. Profitwise for the three companies, because there is no competition pricewise among your customers.

Mr. RHOADES. I think cigarettes sell for about the same price, do they not? You say there is no competition to sell cigarettes? There is competition to sell at equal prices.

Mr. MULTER. Assuming what you say is so, it does not answer the question.

Mr. RHOADES. We publish the price of 26 cents because we felt that that is what we were entitled to get for aluminum pig. What Reynolds does, what Alcoa does, is their business.

Mr. MULTER. But do you not think it is the public's business, too, to inquire, and to have their representatives inquire, why, in a competitive business, the price is exactly the same? Now, the same thing may apply in the cigarette industry, but then some committee ought to start asking questions about the cigarette industry. But we are

now concerned with your industry, and I want to be perfectly fair to you, as I have tried to be fair to all the other representatives of the companies who come here.

I do not want to put you on a spot, and I do not want to put you in a bad light, but I think the public is entitled to some explanation. Here is a highly competitive business. We are not going to ask you to disclose to your competitors what your trade secrets are, or even your secret costs. But there should be some variance in this price. Here we have a market where the supply exceeds the demand, and yet the price is precisely the same among the competitors who are supplying the product. I think we are entitled to know why.

Mr. RHOADES. Well, if our price were 27 cents, I am sure that we would not sell any aluminum.

Mr. MULTER. But you would sell more if it was 25 cents.

Mr. RHOADES. That is a matter of opinion.

Mr. MULTER. Do you not think you would?

Mr. RHOADES. I am sure that, if our price were 25 or 24, we would all have the same price over a period of time.

Mr. MULTER. You mean Alcoa would cut their price to meet yours and Reynolds would cut their price?

Mr. RHOADES. I would get all the business.

Mr. MULTER. You would get all the business until they cut their price?

Mr. RHOADES. That is right.

Mr. MULTER. Would not that be good business?

Mr. RHOADES. We have to make a profit, you know.

Mr. MULTER. Of course, you must. If you do not make a profit, you close up, and the banks would lose the money they lent to you and your stockholders would lose the money they have invested, and nobody wants to see that happen.

Mr. RHOADES. We are making less profit this year, when the price is 26 cents, than we made last year, when the price was 25 cents.

Mr. YATES. Is this overall, or on primary production alone?

Mr. RHOADES. This is on an overall basis.

Mr. YATES. Is this true on your sales of primary?

Mr. RHOADES. Pardon?

Mr. YATES. Is this true on your sales of primary?

Mr. RHOADES. I could not state definitely whether that is the case. I know that we have had some increases in our gas contracts at Chalmette, which have to do with the costs of producing power.

Mr. MULTER. When your production is increased to approximately 609,000 short tons per year, as you anticipate it will be when your present plants in course of construction are completed, will your price be the same?

Mr. RHOADES. I do not know.

Mr. MULTER. Will your costs of production be the same?

Mr. RHOADES. I doubt it. Whether they will be a little higher or a little lower, I do not know.

Mr. MULTER. Would you care to comment on the observation I made to Mr. Wilmot a few moments ago that your industry seems to have succeeded in repealing the law of supply and demand?

Mr. RHOADES. I think that at least Kaiser Aluminum in the aluminum industry is trying to have a price for aluminum whereby we can make a profit, we can expand our business, and we can enlarge

the aluminum industry, and we are not in this business to take advantage necessarily of supply and demand. A year and a half ago we could have gotten 35 cents a pound for all the aluminum we wanted to sell, but we did not do it. We sold it at 25 or 24 cents a pound, because that is at least our theory that we should produce and sell, produce at a profit and sell at a reasonable price, and enlarge this market.

Mr. MULTER. What I cannot understand, and no one has apparently been able to explain to us, is why Alcoa, that produces almost 800,000 short tons in the year 1957, must charge 26 cents and why you and Reynolds, producing approximately the same quantity, under 500,000 short tons a year, also must charge that same price. It just strikes me as being not right.

Now, if you are charging what you need to make a profit, then maybe they are charging too much or vice versa. I am for the profit motive and the free-enterprise system, but it strikes me that there is something wrong here, that the price is always the same. You could have charged 35 cents a year ago and the trade probably would have paid it. The other companies could have done it, too, but you did not, and I think you did not because Alcoa and Reynolds were charging the same price.

The demand is now way under the supply. I am excluding the Government as one of your customers. The price remains the same.

Mr. RHOADES. Costs remain the same, too, and if demand goes down, the cost goes up.

Mr. MULTER. Does the profit remain the same?

Mr. RHOADES. No; we have idle facilities that are an expense to our business; our unit costs are bound to go up.

Mr. MULTER. In most businesses when that happens, you do not let your inventory pile up. You do not close your plant. You try to cut the price and increase the demand for your product. You are waiting for the demand to catch up with the supply. When I say "you," I mean the industry. I am not picking on you individually; but you and Reynolds and Alcoa are doing the same thing.

Mr. RHOADES. We are not waiting for it to catch up. We are doing something about making it catch up.

Mr. MULTER. I am very pleased with what you are doing, what I have seen you do, and from your brochures and books and pamphlets, to increase the demands of industry. You are increasing the supply, but also seek to increase the demand. Alcoa is doing it along another line. As of today all of you are letting your inventories pile up instead of cutting your price and moving your product out. That runs counter to everything we have been told by all the economists as to how the law of supply and demand operates. Someday maybe we will get the answer, Mr. Chairman.

Thank you, Mr. Rhoades.

Mr. YATES. I have a question here.

In this morning's testimony Mr. McConnell of Reynolds stated—

for many years the industry has followed the practice of selling primary aluminum as three different products, pig, ingot, billet.

Then he said:

Each of these commodities is sold at different prices. The contracts to General Motors and Ford established a fourth primary aluminum product.

Do you agree with that statement:

Is molten metal a fourth primary aluminum product?

Mr. RHOADES. Yes; I guess you would have to say it is a primary aluminum product, as a stage between the pot and being solidified in the mold. It is between the actual reduction pot and being cast into a mold and chilled.

Mr. MULTER. If we are to consider the molten metal as the fourth product, why don't we go back one step further in the process and say alumina is a fifth product?

Mr. RHOADES. Or bauxite.

Mr. MULTER. The bauxite would be a sixth. It is bauxite first, then alumina, then molten metal, then either ingot, billet or pig. Molten metal can go right into the sheet.

Mr. RHOADES. It is certainly not billet and it is not pig and it is not ingot and it is not alumina, so I think it must be molten metal.

Mr. YATES. Is this considered to be a primary metal in the classical sense that this is known in the aluminum industry?

Mr. RHOADES. Yes; I should say that it is primary metal because it has been produced from alumina. The secondary is produced from scrap.

Mr. YATES. Does Kaiser sell this fourth primary aluminum product?

Mr. RHOADES. No.

Mr. YATES. You have no customers for it?

Mr. RHOADES. No, sir.

Mr. YATES. You are not trying to sell it either at the moment?

Mr. RHOADES. We keep thinking about it.

Mr. YATES. I am sure that you do and I am sure that the other aluminum companies do too. Were you approached by any of the automobile companies?

Mr. RHOADES. We talked to the automobile people.

Mr. YATES. Were you approached by them with reference to serving them in the same way that Reynolds serves GM and Ford?

Mr. RHOADES. I was not personally and to my knowledge no one was. Some of our salesmen may have been approached or our sales people may have approached them.

Mr. YATES. Would you like contracts of that type for Kaiser?

Mr. RHOADES. I have not made up my mind yet.

Mr. YATES. I pulled this out of Time magazine.

"Out of the blue the big breakthrough"—which is a very handsome ad for the B–58 Buick produced by General Motors.

Mr. MULTER. No commercials.

Mr. YATES. Well, on the contrary, this is a hearing that is concerned with commercials for automobiles and for aluminum, and I would think, judging by the pictures what I see in here, which is a document, a resplendent document, which has been furnished to this committee, that you have pretty well made up your mind. Isn't this what you

want to do, furnish the type of material that goes into cars of the kind that you have drawn here?

Mr. RHOADES. I thought you were specifically referring to hot metal.

Mr. YATES. I was, but hot metal is going to produce this; isn't it?

Mr. RHODES. Oh, not necessarily. There are a lot of sheet applications there too, the grille, for instance, and extrusions.

Mr. YATES. Grilles and extrusions, and hot metal will not be used for this?

Mr. RHODES. It is my understanding that the facility that is adjacent to the Reynolds facilities is a casting facility, pistons and transmissions, I think.

Mr. YATES. I assume that tomorrow when General Motors testifies before our committee, they will be able to tell us whether that is true or not, to let us know just what they intend to do with the hot metal?

Mr. RHOADES. I have no knowledge of there being any extrusion operations or sheet operations.

Mr. YATES. Have you had any discussions with any other basic industry with respect to furnishing hot metal?

Mr. RHOADES. Basic industry?

Mr. YATES. Any other industry?

Mr. RHOADES. Like what?

Mr. YATES. Any other industry.

Strike the word "basic."

Mr. RHOADES. No.

Mr. YATES. Mr. Riehlman.

Mr. RIEHLMAN. Mr. Chairman, I have no questions, but I would like to make this observation. This being my first day and first indoctrination into the aluminum industry and the committee's activities in this field, I have been deeply impressed by the great background of knowledge my chairman has of this industry and also my colleague, Mr. Multer, and I must not let this opportunity go by to express my feeling toward the three industries who have been before our committee today, the fine manner in which they have presented their case, and the willingness on their part to answer the questions propounded to them honestly and fairly as far as I could observe.

I think it has been a very enlightening and very helpful hearing and one that I have enjoyed and I appreciate having an opportunity to serve on the committee, and I am sure from now on, Mr. Chairman, with this background and enlightenment I have had I will be a more valuable member to the committee.

Mr. YATES. That is a fine statement and I am sure Mr. Multer and I will want to accept that statement for ourselves.

I want to express the gratitude of the commitee for the cooperative attitude on the part of the primary producers in making available to us their experience, their knowledge, and their advice as to what they have done and their impressions as to what the future of their industry is likely to be.

Mr. MULTER. Mr. Chairman, I think you are about ready to conclude?

Mr. YATES. Mr. Multer, yes.

Mr. MULTER. I would like, before I join in the exchange of compliments, to put one other piece of information on the record.

I probably should have asked this of the other gentlemen who have testified for Alcoa and Reynolds, but the question did not occur to me at that time.

Carbon dioxide is a gas; am I not right?

Mr. RHOADES. I am no chemist.

Mr. MULTER. Let's assume that I know enough about chemistry to say that it is.

You liquefy carbon dioxide, add nothing to it, take nothing away, just liquefy it and it is a liquid.

Take that also as a chemical fact. You then take it and solidify it. You add nothing to it, take nothing away from it, and you have dry ice.

It is still basically just carbon dioxide. It has just been processed, and you can process it back and forth either way. You won't say that carbon dioxide is three different products, would you, when it is a gas, a liquid, or a solid?

You see, the point I am making is: There you have the same product just as you take your alumina. After you process it, you convert it into your hot metal, and then you just go one step further, and the hot metal becomes your ingot, your billet, or your pig. So I say basically it is the same.

I don't see the distinction between that and the carbon dioxide example that I gave you.

Mr. RHOADES. It is in a different form, but it is the same product.

Mr. YATES. Mr. Reporter, will you include this chart from the American Metal Market which was furnished us by Alcoa at this point in the record?

(The document is as follows:)

[From American Metal Market, Sept. 28, 1957]

Primary aluminum ingot capacity in United States and Canada

[In short tons]

Company and plant site	June 30, 1957	Being built or planned	Total
Aluminum Co. of America:			
Alcoa, Tenn	157,100		157,100
Badin, N. C	47,150		47,150
Evansville, Ind		150,000	150,000
Massena, N. Y	112,250		112,250
Point Comfort, Tex	120,000	20,000	140,000
Rockdale, Tex	150,000		150,000
Vancouver, Wash	97,500		97,500
Wenatchee, Wash	108,500		108,500
Total	792,500	170,000	962,500
Reynolds Metals Co.:			
Arkadelphia, Ark	55,000		55,000
Jones Mills, Ark	109,000		109,000
Listerhill, Ala	77,500	112,500	190,000
Longview, Wash	60,500		60,500
Massena, N. Y		100,000	100,000
San Patricio, Tex	95,000		95,000
Troutdale, Oreg	91,500		91,500
Total	488,500	212,500	701,000
Kaiser Aluminum & Chemical Corp.:			
Chalmette, La	220,000	27,500	247,500
Mead, Wash	176,000		176,000
Ravenswood, W. Va		145,000	145,000
Tacoma, Wash	38,500	2,500	41,000
Total	434,500	175,000	609,500
Anaconda Aluminum Co., Columbia Falls, Mont	60,000		60,000
Harvey Aluminum Co., The Dalles, Oreg		54,000	54,000
Olin Revere Metals Corp., Clarington, Ohio		180,000	180,000
Total, others	60,000	234,000	294,000
U. S. total	1,775,500	791,500	2,567,000
Aluminum Company of Canada:			
Arvida, Quebec	362,000		362,000
Beauharnois, Quebec	37,000		37,000
Isle Maligne, Quebec	115,000		115,000
Kitimat, British Columbia	180,000	150,000	330,000
Shawinigan Falls, Quebec	68,000		68,000
Total	762,000	150,000	912,000
Canadian British Aluminium, Ltd, Baie Comeau, Quebec		90,000	90,000
Canada total	762,000	240,000	1,002,000
Total United States and Canada	2,537,500	1,031,500	3,569,000

NOTE.—Data in the above table supplied to American Metal Market by the individual companies. Additional capacity is blueprinted for the Kaiser Ravenswood works while Alcan presently plans additional capacity in the Saguenay region, using power from its new Peribonka power station. No starting date has been determined for either expansion project.

Mr. YATES. Thank you, Mr. Rhoades, for a fine statement.

The committee stands in recess until 10 o'clock tomorrow morning.

(Whereupon, at 4:40 p. m., the subcommittee recessed, to reconvene at 10 a. m. Tuesday, November 19, 1957.)

ALUMINUM INDUSTRY

TUESDAY, NOVEMBER 19, 1957

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON MINERALS AND
RAW MATERIALS OF THE SELECT COMMITTEE
TO CONDUCT A STUDY AND INVESTIGATION
OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10:05 a. m., in room 1301, New House Office Building, Hon. Sidney R. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding), Multer, and Riehlman.

Also present: Bryan H. Jacques, staff director; Irving Maness, counsel; Bert Z. Goodwin, special assistant counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The committee will come to order.

We are pleased this morning to have the representatives of the three major automobile companies before the committee to make statements with respect to the use of aluminum in the automobile industry.

Our first witness is the chief engineer on materials for Chrysler Corp., Mr. M. F. Garwood. Mr. Garwood, we are pleased to have your statement and we will welcome your testimony at this time.

TESTIMONY OF M. F. GARWOOD, CHIEF ENGINEER, MATERIALS, CHRYSLER CORP.; ACCOMPANIED BY ARTHUR C. PRINE, JR., LEGAL DEPARTMENT, AND VANCE JOHNSON, PUBLIC RELATIONS DEPARTMENT

Mr. GARWOOD. Thank you, Congressman Yates.

Mr. Chairman and gentlemen of the committee, my name is M. F. Garwood. I am chief engineer, materials, of Chrysler Corp. My office is at 12800 Oakland Avenue, Detroit 31, Mich.

I am here in response to your invitation to discuss the future use and uses of aluminum by our company.

Chrysler Corp. pioneered the use of aluminum in automobiles. From its earliest days to the present, it has consistently led the automotive industry in applications of aluminum.

Aluminum pistons were first introduced on early models of the Chrysler car in the 1920's, and by the early 1930's they were in use on the De Soto, Dodge, and Plymouth cars as well. It was not until after World War II that all other mass producers of automobiles adopted aluminum pistons as standard.

Application of aluminum to Chrysler Corp. cars has increased steadily through the years since 1946, and particularly since 1953. Based on an "average" model—that is, a 4-door sedan with a V–8 engine, power steering, and automatic transmission—consumption figures for Chrysler Corp. cars compare with industry averages as follows:

1946—Chrysler, 9 pounds; total industry, 2 pounds.
1955—Chrysler, 70 pounds; total industry, 29.6 pounds.
1957—Chrysler, 100 pounds; total industry, 45 pounds.

Use of aluminum on 1958 model Chrysler Corp. cars, and the ratio to average industry use, remains approximately the same as on the 1957 models.

As indicated above, the most rapid advances in application of aluminum to Chrysler Corp. cars has occurred since the end of the Korean war, during which restrictions were placed on the use of many metals. Nevertheless, substantial progress had been made in each of the years following World War II.

By 1950, aluminum parts utilized on Chrysler Corp. cars included engine pistons, wheel cylinder pistons, fuel pumps, clutch housings, oil seal plates, scuff plates, headlamp housings, battery holddown trays and bolts, fan spacers, accelerator pedal levers, water pump bypass elbows, bumper guards and bumper face bar sections.

Today the list is much longer. It includes many of the above parts plus such others as converter housings and stators, automatic transmission components, carburetor bodies, grille assemblies, instrument panel components, nameplate and decorative plate, body pillar moldings, sedan door window frames, hood medallions, windshield garnish moldings, shelf panel moldings and several interior trim moldings.

Chrysler Corp.'s consumption of aluminum in the 1957 model year exceeded 100 million pounds.

For the 1958 model year, a total of 1,599 individual aluminum parts have been released for Chrysler Corp. production models and service parts. These parts are distributed among the automobile and truck manufacturing divisions as follows:

	Parts		*Parts*
Plymouth	340	Chrysler	266
Dodge	296	Imperial	245
De Soto	326	Truck	126

Chrysler Corp.'s consumption of aluminum is significant for the aluminum industry. It is also significant for American small business.

Chrysler Corp. depends primarily upon outside suppliers for its aluminum parts requirements. Of the 1,599 individual aluminum parts released for 1958 production, Chrysler Corp. will produce for its own account only a portion of its requirement for pistons and automatic transmission die castings. We estimate that the corporation manufactured for its own account less than 18 percent of its total aluminum parts consumption in 1957.

The major portion of our aluminum parts is purchased presently from 41 suppliers. It will be of interest to this committee to learn that these suppliers are categorized by size as follows:

Employing 100 persons or less, 9 suppliers;
Employing 100 to 500 persons, 18 suppliers;
Employing over 500 persons, 14 suppliers.

Many practical considerations lie behind Chrysler Corp.'s steady expansion in the application of aluminum to its automobile manufacture. Among them is the light weight of aluminum, which makes transportation and handling easier and less expensive. Aluminum is resistant to corrosion and does not require the costly plating process of ferrous metals. It needs only anodizing for decorative exterior applications. It is readily adaptable to die-casting and hot and cold extruding under high-production, low-cost automatic procedures. Aluminum can be machined at very high speeds—as a matter of fact, at speeds greater than any now available with present production machine tools.

These qualities are of great importance to manufacturers. For example, one of the important aluminum components of Chrysler Corp. cars is the torque converter housing. It weighs approximately 10½ pounds. If cast from iron instead of aluminum, it would weigh almost 50 pounds.

Of even greater importance than this saving in weight, however, is the fact that the aluminum housing can be cast in automatic equipment at very high rates of speed. It can be cast to very close tolerances and with a high degree of intricacy and coring. This not only results in a great reduction in weight but requires fewer machining operations.

Another example is the spark plug tube, which serves as a gasket and as a protector from oil. Thousands of these pieces are used daily in the production of Chrysler Corp. eight-cylinder engines. This part formerly was made by multiple die forming of steel tubing, followed by plating to prevent rust. The aluminum part is cold impact extruded in a small mechanical press from flat wafers stamped from sheet. The press will produce 60 pieces in a minute, and plating is eliminated.

As I said earlier, aluminum uses such as these are important for economic reasons. Applications of aluminum also have made a significant contribution in maintaining a reasonable weight in Chrysler Corp. cars during a period when many new items of equipment—such as automatic transmissions, power steering, power brakes, and air conditioning—have been added for the safety, comfort, and convenience of drivers. As automobiles have become larger and roomier and as new equipment has been added, they necessarily have become heavier. But we estimate that applications of aluminum in place of heavier metals have resulted in holding down the overall weight of our cars in an amount equal to the weight of 2 average-sized passengers—or by approximately 300 pounds.

We expect that Chrysler Corp.'s aluminum consumption will continue to increase with future models. Application of such new items as aluminum brake housings and additional decorative parts could increase Chrysler Corp.'s present consumption to approximately 150 million pounds annually.

In the future, aluminum might be preferred over other metals for a number of purposes. Under consideration, for example, are such constituents as engines, roofs, bumpers, and radiators.

There is much current activity in the development of die-cast aluminum engine blocks and heads, and it is reasonable to assume that this activity eventually will result in production techniques for producing

these parts. Extruded or cast aluminum bumpers, with inserts of stainless steel or vinyl plastic to protect them from denting, look promising. Aluminum radiators are undergoing extensive tests. Stylists already are beautifying roof areas which low silhouettes expose to view. In future designs, decorative aluminum may be considered for this purpose.

Production application of aluminum for such purposes as these, of course, will depend upon many factors. It must be demonstrated, for example, that aluminum will do the job as well or better than other materials without adding to the price of the car. This means, in part, that aluminum must be produced in quantities adequate to meet production needs and that aluminum must maintain a favorable price relationship to other metals. Much also will depend upon the rate at which introduction of new aluminum processing machinery, to replace current production machinery which is designed to process other metals, becomes advantageous.

In the highly competitive world in which we do business, economic considerations necessarily are of immense importance. When real economic advantage can be gained, the use of one metal in place of another naturally will be accelerated. Yet we at Chrysler Corp. have had much longer-term considerations in mind as we have pursued our research and development work in aluminum. One of these is the availability of basic metals.

Present information on the composition of the earth's crust, when translated into a volume relationship, reveals that aluminum is 5 times more prevalent than iron. This fact cannot be ignored in any long-range consumption planning. It is a fact which supplies additional impetus for us at Chrysler Corp. as we continue searching for practical new applications of aluminum and other light metals in the manufacture of our automobiles.

Mr. YATES. Thank you for an excellent statement, Mr. Garwood. Certain preliminary thoughts came to my mind as you went over your statement. I noticed on page 4 you said that automobiles have become larger and roomier. As I told you before the hearing, a few months ago I bought a 1956 Chrysler New Yorker. I would have preferred to buy a 1957 New Yorker but I couldn't get into it. That is because I happen to have a sacroiliac condition.

Mr. GARWOOD. Thank you.

Mr. YATES. My good friend, Congressman Multer, has shown up this morning with a sacroiliac condition, too. I am sure that he too would find some difficulty in getting into one of your 1957 hardtop New Yorkers.

But another thought comes to my mind. I am impressed with the efficiency of the automobile industry. I think perhaps as much, if not more than the other industries of America, you have attained peaks of engineering and productivity. Why then do your prices go up each year? Can you tell us that?

Mr. GARWOOD. Prices go up every year I suppose for one thing because labor goes up and the price of materials goes up, and so that has to be compensated for in order to make a profit.

Mr. YATES. On the last page of your statement you refer to the highly competitive world in which you do business. I would have thought that one of the best ways to compete successfully would be through a reduction in price. Wouldn't you think so?

Mr. GARWOOD. If it were possible, I think everyone in the automotive industry would like to reduce prices.

Mr. YATES. Yesterday I think it was Mr. Wilmot who talked about aluminum being first used in the Pierce-Arrow. You talk about pioneering the use of aluminum. There is no relationship between your company and Pierce-Arrow, is there?

Mr. GARWOOD. None whatsoever. What is meant by the word "pioneering" is that we, as these figures show, actually used it in many more applications and exploited its use to a greater extent than other automobile manufacturers.

Mr. YATES. I had occasion to call the Federal Trade Commission this morning. We of this committee are concerned, of course, with the future of the small-business man in the aluminum industry, and of course one of aluminum's major markets will be the automobile industry. The economist with whom I spoke at the Federal Trade Commission indicated that Chrysler was tending to do more of its own manufacturing rather than giving some of the parts manufacturing to outside contractors. He read to me from your annual reports from 1946 through 1955. He described it as the ratio of percentages of materials and services done within the company to that done on the outside. In 1946 the ratio was 67.9 and it has a general decreasing trend except for 1951 and 1953 down to 60.2 percent. Is this about correct?

Mr. GARWOOD. Does that pertain to aluminum?

Mr. YATES. No, I think that is all purchases. Would you know about that?

Mr. GARWOOD. Purchases of all materials?

Mr. YATES. Yes.

Mr GARWOOD. No, I would not know about that.

Mr. YATES. In previous years the automobile manufacturers have frequently bought out new suppliers. I wondered whether or not the hot metal contracts like those between two of the automobile manufacturers and Reynolds portends that same sort of practice for the future. Of course, I assume that in a contract the purchase of the hot metal is from an outside supplier?

Mr. GARWOOD. That is correct.

Mr. YATES. Perhaps sometime in the future we might find GM or Ford buying this plant of Reynolds and taking over the operation itself. Now, why hasn't Chrysler entered into a hot metal contract. You apparently use more aluminum in your cars than the other companies do?

Mr. GARWOOD. We did not feel it was economically advantageous for us to do that. We would have had to build plants at the aluminum company reduction cells, and we felt that there were other areas where we could use that money and obtain a greater return on our capital investment.

Mr. YATES. Had you considered it?

Mr. GARWOOD. Yes, we had considered it.

Mr. YATES. Had you had occasion to discuss the possibility with any of the aluminum companies?

Mr. GARWOOD. Yes, we did.

Mr. YATES. With whom did you discuss it?

Mr. GARWOOD. We discussed it with Reynolds and Olin, Revere and Harvey and Kaiser.

Mr. YATES. Were these just preliminary discussions?

Mr. GARWOOD. They were preliminary discussions, that is right.

Mr. YATES. And you decided that you did not want to make the investment?

Mr. GARWOOD. That is correct.

Mr. YATES. Do you feel that this will hurt you competitively in the future?

Mr. GARWOOD. No, we do not.

Mr. YATES. Are you able to buy aluminum as advantageously as Ford or General Motors?

Mr. GARWOOD. I think so.

Mr. YATES. Don't you have to pay more for it than they do?

Mr. GARWOOD. Well, you see we buy——

Mr. YATES. For pig, as contrasted to hot metal?

Mr. GARWOOD. It is true we pay probably—we do not know how much they pay for it so that is a hard question to answer.

Mr. MULTER. It is not a trade secret, is it, what they pay for it?

Mr. GARWOOD. No. I know what we were offered, Mr. Multer, and what we were offered was slightly less than the price of pig, and it varied somewhat.

Mr. MULTER. Excuse me. Mr. Chairman, I think the witnesses we heard yesterday are still in the room. Can't we get from one of them the price that is being paid for the hot metal?

Mr. YATES. That is in the contract in the record.

Mr. MULTER. The contract is in the record?

Mr. YATES. Yes, the contract is in the record. Have you seen the prices as are shown in the contracts? They are not secret documents.

Mr. GARWOOD. No, I haven't.

Mr. YATES. They have been made public by the Securities and Exchange Commission.

Mr. GARWOOD. I haven't seen those prices.

Mr. YATES. Take the published price. I assume you pay the published price for your aluminum?

Mr. GARWOOD. That is correct.

Mr. YATES. They take the published price. They deduct the freight factor.

Mr. GARWOOD. That is right.

Mr. YATES. And then they deduct 10 percent, and with respect to—I wanted to get the one with the example. This starts with a published price of 22½ cents, which I assume was the price as of November 1955 when this contract was executed. It begins with the published price of 22½ cents, deducts a freight factor of 0.007655, achieving a result of $0.217 plus. Then they deduct 10 percent. The molten metal delivered price winds up at $0.193731 per pound.

Mr. GARWOOD. That is cheaper than the published price, that is correct.

Mr. YATES. Much. Yes, significantly. Were you offered a price comparable to that for molten metal?

Mr. GARWOOD. I do not know. I am not in that department. I did not see those prices.

Mr. YATES. I thought you had participated in the discussion.

Mr. GARWOOD. No, sir.

Mr. YATES. Who in your organization did discuss this, somebody in the purchasing department?

Mr. GARWOOD. Yes, in the purchasing department.

Mr. YATES. If they are able to purchase aluminum at this price, at this reduction from the published price because they buy it in its molten state, that is a significant competitive advantage over Chrysler, isn't it?

Mr. GARWOOD. That is correct, in the price of aluminum only, but what it amounts to is that you have to pay for all these plants that you build, and then in addition to that, I was told at least by our purchasing department that when we were offered these deals that they entailed a certain minimum amount, and we do not actually make enough aluminum to take advantage of that.

Mr. YATES. You mean purchase enough aluminum?

Mr. GARWOOD. That is right; we do not at Chrysler.

Mr. YATES. That is the advantage of size there, isn't it?

Mr. GARWOOD. Yes, sir.

Mr. YATES. I noticed in the statement that General Motors had furnished us, which will be presented later in the morning, that they use approximately 45 pounds per car in contrast to your 100 pounds.

Mr. GARWOOD. That is right.

Mr. YATES. You use more than twice as much as they do per car?

Mr. GARWOOD. That is right.

Mr. YATES. I do not know the figures on the sales of cars, but is not the amount of aluminum that you use almost equal to the amount they use?

Mr. GARWOOD. No. We produce about 20 percent of the cars and I think General Motors produces about 50 percent.

Mr. MULTER. They produce approximately twice as many cars as you do?

Mr. GARWOOD. More than twice as many.

Mr. MULTER. And you use approximately twice as much aluminum?

Mr. GARWOOD. They produce quite a few more than twice as many. We are about 20 percent and they are actually about 50 percent, I believe.

Mr. YATES. I notice on page 5 of your statement you state that your present consumption is approximately 150 million pounds annually. That is a pretty significant amount—150 million pounds annually.

Mr. GARWOOD. No; I said that it could be, in that statement, I believe. It is about 100, but it could be as much as 150 if we made more parts out of aluminum.

Mr. YATES. What is it now, 100?

Mr. GARWOOD. 100; yes. We make approximately 1 million automobiles, so you can multiply that by a hundred.

Mr. YATES. If you use more aluminum, do you look forward to the time when you will use molten metal rather than——

Mr. GARWOOD. There is a possibility.

Mr. YATES. Than taking the pig?

Mr. GARWOOD. At the moment we have no such contracts. We are not negotiating any such contracts and we do not plan to.

Mr. YATES. Parenthetically, too, I notice you talk about one of these as the availability of basic metals that will determine what you

do in the future. What are you going to do about parking places? We are running out of those in the city of Chicago.

Mr. GARWOOD. That is right. We are in Detroit, also.

Mr. YATES. Mr. Multer.

Mr. MULTER. Can you tell us what the cost of aluminum was per pound in 1946?

Mr. GARWOOD. No; I'm sorry; I cannot.

Mr. MULTER. Can you supply that to us for the record?

Mr. GARWOOD. Yes; we will do that.

Mr. MULTER. I notice that you refer, on page 3, to outside suppliers. Are any of these outside suppliers owned by the Chrysler Co.?

Mr. GARWOOD. No, sir.

Mr. MULTER. You refer to 18 suppliers with employment of 100 to 500 persons. You also have a category of 100 persons or less and a third category of over 500 persons. Which of those three categories do you think is small business?

Mr. GARWOOD. I think any business of 500 or under would certainly be considered small business.

Mr. MULTER. Are you familiar with the industry-by-industry definition that the Small Business Administration has put out?

Mr. GARWOOD. No, sir, Mr. Multer, I am not.

Mr. MULTER. They have a definition which they promulgated for lending purposes, financing purposes, those who are looking for financial assistance, and none of the suppliers that come within the category who would be able to supply you with your needs is listed by SBA as small business if they have more than 250 employees. In other words, the classification for those who would be your suppliers would be small business if they had 250 or less employees. Now, I realize that in the Defense Department they have used the outworn numerical definition of 500, but I cannot blame you too much if you use the same definition.

Mr. GARWOOD. Thank you.

Mr. MULTER. Could you give us a breakdown on how many of the suppliers are under 250?

Mr. GARWOOD. No; I do not have that information.

Mr. MULTER. Could you get it for us without too much trouble?

Mr. GARWOOD. Yes; I will be glad to.

Mr. MULTER. Do you get any of your aluminum parts from Alcoa, Kaiser, or Reynolds?

Mr. GARWOOD. Not that I am aware of, although I think we have had some experimental parts.

Mr. MULTER. You do buy your pig from either Alcoa, Kaiser, or Reynolds?

Mr. GARWOOD. We have.

Mr. MULTER. Just what processing does Chrysler do with the aluminum pig and ingot that it buys?

Mr. GARWOOD. We melt it and pour it into permanent molds, and also we make a few transmission parts in a new plant that we have just established. Those are diecastings.

Mr. MULTER. Will you tell us the increase in labor costs that Chrysler has had from 1955 to 1956 and 1956 to 1957?

Mr. GARWOOD. I do not have those figures.

Mr. MULTER. Could you get that for us?

Mr. GARWOOD. Yes; we can.

Mr. MULTER. Thank you.

(This material appears in the appendix, p. 437.)

Mr. YATES. My attention has been called to the fact that the Jones Mill contract that GM has with Reynolds is for the production of 40 million pounds of aluminum annually. The contract that Reynolds has with General Motors for the plant at Massena contemplates the production of 75 million pounds. Chrysler uses 100 million pounds now.

Mr. GARWOOD. That is for all parts; yes.

Mr. YATES. That is for all parts.

Mr. GARWOOD. Only 18 percent of that is used by Chrysler Corp., that is as fabricated where Chrysler Corp. has furnished its pig.

Mr. YATES. You stated a moment ago that the price they paid for aluminum under a hot-metal contract is cheaper than the price you paid, as I read those figures to you.

Mr. GARWOOD. We do not buy any hot metal.

Mr. YATES. That is right, and I asked you whether it was a distinct competitive advantage, and as I remember your answer you said you thought it was.

Mr. GARWOOD. Yes.

Mr. YATES. What could you do, what savings could you accomplish, if you were in a hot-metal situation rather than in a situation where you have to buy pig? Could you make your own castings? Could you make your own parts? What would you do?

Mr. GARWOOD. I would think that these people that have those contracts would be able to answer that a lot better than I. We did not think there was very much advantage or we would have probably considered it more than we did.

Mr. YATES. Was there a question of not being able to finance an operation of this type?

Mr. GARWOOD. No; that was not the question. The question was whether we should use our money. The money was available but it was whether we should use it there or someplace else where we would get a greater return.

Mr. YATES. You have a limited budget and it was a question of applying it to other factors that you thought were more desirable?

Mr. GARWOOD. I do not know that we have a limited budget, but I think no large company has unlimited funds, and all of them have to watch pretty closely where they put their money.

Mr. YATES. Mr. Riehlman.

Mr. RIEHLMAN. I do not have any questions.

Mr. YATES. Mr. Dalmas?

Thank you very much for your statement, Mr. Garwood and the gentlemen from Chrysler.

Mr. GARWOOD. You are quite welcome.

Mr. MULTER. Mr. Chairman, may I ask Mr. Garwood to supply for us for the record the dollar aggregate of the amount of subcontracts or contracts with outside suppliers by the 3 categories with the number of firms under 100——

Mr. GARWOOD. Yes.

Mr. MULTER. The number of firms from 100 to 250 and the number of firms 250 to 500 or over. You don't need the breakdown of over 500. Give us everything in 3 categories, under 100, 100 to 250, and

everything over 250; the aggregate in dollar amount for each of those three classifications.

Mr. GARWOOD. We can do that.

(This material appears in the appendix, p. 437.)

Mr. YATES. Mr. Cronin, please.

Mr. Cronin, the committee is delighted to have you with us. We will be pleased to have your statement. Mr. Cronin, gentlemen, is one of the vice presidents of General Motors. He is in charge of the manufacturing staff.

TESTIMONY OF JOHN J. CRONIN, VICE PRESIDENT, GENERAL MOTORS CORP., ACCOMPANIED BY DANIEL BOONE, ATTORNEY, AND DONALD K. BARNES, ATTORNEY

Mr. CRONIN. I am accompanied this morning by Mr. Daniel Boone and Mr. Donald Barnes, of our legal staff.

Mr. YATES. Chrysler talked about pioneering. You have Daniel Boone with you. I assume that that is an equalizing factor.

Mr. CRONIN. Yes; but I am a little disappointed that they seem to have outstripped us in the use of aluminum.

Mr. YATES. Apparently they are using twice as much aluminum per car as you are.

Mr. CRONIN. I noticed that.

My name is John J. Cronin. I am vice president of General Motors Corp. in charge of the manufacturing staff. Mr. Harlow Curtice, president of General Motors Corp., has requested me to appear before your committee in response to the invitation issued by Chairman Yates. I understand from the chairman's invitation that the committee would be interested in having testimony from General Motors relating to the future use of aluminum in General Motors automobiles.

I am sure that the committee will recognize that any forecast of the future use of aluminum must, of necessity, be somewhat speculative. As you know, research, both in the automobile industry and in the metals industry, is constantly seeking more effective and economical manufacturing techniques and usages. As the art in the metals field develops we attempt to apply those new techniques which give promise of increasing the efficiency of today's automobile, improving its quality, or providing greater customer comfort, safety, and value.

While it is very difficult to forecast future usage of any material used in an automobile we believe that we can indicate to the committee the general direction in which our usage of aluminum is trending, if we assume that the present rate of development in the aluminum industry continues, and if we further assume that there are no basic substitutions arising from new developments in the metals field.

The committee might be interested in a brief review of our past experience with respect to the use of aluminum; our present usage of the metal, stated in terms of fabrication in our own plants and the parts that we purchase from outside General Motors; and our present best guess as to the possible future uses of aluminum in the manufacture of automobiles.

REVIEW OF ALUMINUM USAGE IN GENERAL MOTORS CORP.

We purchase two general types of aluminum: Fabricated parts, such as forgings, castings, and stampings, and unfabricated aluminum, such as rods, bars, sheets, pig, and molten metal. The use of aluminum in our automobiles did not become significant until approximately 1950. For the purpose of showing the usage since 1951 we have compiled a schedule setting forth the average weight of aluminum used in a composite General Motors passenger car in each of the model years 1951 through 1958:

In pounds	Fabricated outside the corporation	Fabricated inside the corporation	Total
1951	7.37	4.51	11.88
1952	7.10	4.32	11.42
1953	7.50	7.74	15.24
1954	13.17	7.35	20.52
1955	15.44	7.35	22.79
1956	14.57	13.42	27.99
1957	18.25	14.26	32.51
1958	21.93	21.89	43.82

In the year 1951 we used 11.88 pounds per automobile of which 4.51 pounds were fabricated by General Motors in its own plants and 7.37 pounds were purchased from other aluminum fabricators. On our 1958 models we are currently using an average of 43.82 pounds per automobile. Of this total, 21.89 pounds will be fabricated in our own plants and 21.93 pounds will be purchased outside General Motors from 171 aluminum fabricators.

During this period aluminum castings were substituted in several applications for gray iron castings that were produced in the General Motors foundries. This substitution accounts, in the main, for the increased usage that we have experienced.

When we substitute aluminum for gray iron a number of factors enter into the decision as to the extent that we will fabricate the aluminum castings in our own foundries. Among the factors which must be considered are volume, capital investment, complexity of design, and availability of sources for the particular item.

We are not, of course, a newcomer to the aluminum-casting field. General Motors entered the aluminum-casting industry in 1940 when we built our first foundry at the Delco-Remy plant at Anderson, Ind., for the production of diesel and aircraft aluminum castings.

In 1942 Delco-Remy opened a second foundry at Bedford, Ind., for the manufacture of cylinder heads for Allison aircraft engines. Late in the war the Bedford plant was expanded to provide for the manufacture of cylinder heads for the Packard Rolls-Royce engine.

At the close of the war the Anderson plant was converted to the production of commercial electrical products normally produced by Delco-Remy except for a small portion used for the manufacture of aluminum die castings required in commercial products. In April 1946, the Allison Division of General Motors Corp. resumed the production of castings at the Bedford plant.

In addition to these operations, several of the divisions have from time to time conducted small aluminum-casting operations but the total poundage involved has not been significant.

All the foundries that I have mentioned use as their basic raw material primary or secondary pig aluminum. Our total purchases of pig and molten aluminum last year from United States and Canadian suppliers amounted to approximately 1½ percent of total aluminum production.

In addition to these plants, we have a plant at Jones Mills, Ark., which was put into production in 1953 close by the reduction plant of Reynolds Metals Co. The decision to locate a foundry at Jones Mills was largely influenced by the thinking of Mr. Charles F. Kettering, who for many years was the vice president of General Motors Corp., in charge of its research staff. Mr. Kettering felt that the expenditure of energy in the form of gas, electric power, or coal in reheating a cold metal, when castings could be made from the molten metal, represented economic waste. With the objective in mind of eliminating this waste, and also the waste involved in multiple handling of cold metal, we opened a small pilot plant at Jones Mills in April of 1950 to investigate the possibility of using molten metal taken direct from the reduction plant of Reynolds Metals Co.

This was a new industrial process for General Motors. The pilot plant operation proved practicable and in the latter part of 1952 we began the construction of our present molten-metal aluminum-casting plant. Currently we employ approximately 275 people at this location.

Our experience with the Jones Mills operation has proved satisfactory and we are building a similar facility adjacent to a Reynolds Metals Co. plant which is under construction on the St. Lawrence River near Massena, N. Y. It is expected that this plant will commence operations in June of 1959 and when in full production will employ approximately 700 people.

POSSIBLE FUTURE USES OF ALUMINUM

As was stated at the outset, any forecast as to the future use of aluminum in automotive manufacture must, of necessity, be something of a guess. The light-metals industry has made great progress in the past two decades and we think it reasonable to assume that progress will continue to be made in the future in the development of not only aluminum but other light metals as well. There is, of course, no way of forecasting whether aluminum, which has been substituted for heavier metal applications, will, itself, in turn, be subject to replacement by new light-metal developments.

Assuming, however, that the trend toward aluminum usage which we have experienced in the past continues, we believe that aluminum will be an important metal in the production of automobiles for many years to come.

While it is obviously impossible to give the committee any exact figures with respect to what may happen in the future, we believe that it is entirely possible that the average use of aluminum may increase to 75 pounds per automobile by 1965.

Perhaps the most promising areas for the investigation of future substitution of aluminum for other metals are in the manufacture of parts for engines, axles, transmissions, brake drums, radiators, radiator grilles, hardware, and decorative trim. These applications will present problems of design, cost, and styling.

I recognize that a good part of what I have said must appear to be quite general. On the other hand, we have a saying around General Motors to the effect that time runs out on us before we get around to making the last engineering change specified for a current model.

In the manufacture of automobiles we know fairly well approximately 2 years in advance of the initial production the general design of the vehicle as far as its lines and appearance are concerned. We also know the height of the front seat from the floor and the distance from the instrument panel to the back of the front seat, and other such basic design features. We do not, however, know today what the aluminum usage will be in the 1959 automobile, although, as I have said, we have a pretty good idea what the car will look like.

As a matter of general interest I have attached to this statement a photograph which shows some of the 74 aluminum parts used by Buick in its 1958 models.

I hope that the matters that I have discussed will be of assistance to the committee and I will, of course, be very happy to do my best to answer any questions that the members of the committee or the staff may have.

Mr. YATES. Thank you for your fine statement, Mr. Cronin.

Were you surprised by the testimony of Mr. Garwood that Chrysler uses 100 pounds of aluminum per car?

Mr. CRONIN. Indeed I was. As I mentioned, I am going to have to go back and tell our engineers.

Mr. YATES. I noticed in your statement that you thought that by 1960 you would be using 75 pounds. Do I misinterpret your statement?

Mr. CRONIN. No, that is perfectly all right. I speak of averages.

Mr. YATES. I know you do, and I assume that Chrysler was speaking of averages in its cars, too, when it talked about 100 pounds.

Mr. CRONIN. Perhaps so.

Mr. YATES. Perhaps your engineers will find that they have not been using enough aluminum, in view of the testimony of Mr. Garwood.

Mr. CRONIN. Could be.

Mr. YATES. I am sure the representatives of the aluminum companies who are here this morning will be delighted to hear that.

What is the total amount of aluminum that General Motors uses? I notice that you gave us statistics on a per-car average, but you did not tell us what the overall amount is that the company uses.

Mr. CRONIN. I think I have some figures. The figures I would like to submit on our overall use of aluminum, Mr. Chairman, are total General Motors.

Mr. YATES. Yes.

Mr. CRONIN. The figures I have submitted here are on our passenger cars only.

Mr. YATES. When you say "total General Motors," you mean the entire empire with Frigidaire?

Mr. CRONIN. All our divisions, yes.

Mr. YATES. All your divisions?

Mr. CRONIN. Yes, because I did not have time to break out our total purchases and relate them exactly to automotive.

Mr. YATES. May I ask a question before you give those totals. Will the factories or the plants being built to use the hot metal supply all of your divisions, or only your automobile divisions?

Mr. CRONIN. The plant at Massena will supply only our Chevrolet division, not others.

Mr. YATES. And what about the Jones Mills operation?

Mr. CRONIN. The Jones Mills operation and the Bedford operation may supply any or all divisions, but they have a job of selling the divisions on quality and price.

Mr. YATES. We would be pleased to receive the figures now, Mr. Cronin, on the total usage of aluminum.

Mr. CRONIN. In 1956 General Motors purchased total aluminum of 183,168,000 pounds. That is all forms of aluminum.

Mr. YATES. What was that figure?

Mr. CRONIN. 183,168,000.

Mr. YATES. That is pounds, is it not?

Mr. CRONIN. Yes.

Mr. YATES. In 1956?

Mr. CRONIN. Yes, sir.

Mr. YATES. Is that not surprising? This is for all your divisions. Chrysler alone used 100 million apparently.

Mr. CRONIN. Yes. That is why I say our engineers have got some researching to do.

Mr. RIEHLMAN. I wondered if the Chrysler representatives could tell us whether or not the aluminum that he referred to in usage by the Chrysler Corp. was used for any other purpose other than the construction of automobiles?

Mr. YATES. Mr. Garwood, is your aluminum used for any other purpose than the construction of automobiles?

Mr. GARWOOD. No. The aluminum I mentioned is used for automobiles, as I think I stated. In the statement I made, there is recorded the number of parts for each automobile.

Mr. YATES. Thank you.

(Discussion off the record.)

Mr. YATES. Would you repeat that statement for the record?

Mr. GARWOOD. At Dayton, Ohio, we have a division called the Airtemp division where we make heat exchangers and heating facilities like furnaces for homes, and we may use, I know we use a small amount of aluminum there which was not included.

Mr. YATES. Thank you, Mr. Garwood.

Where is the Bedford plant to which you referred?

Mr. CRONIN. Bedford, Ind., north of Jones Mills, Ark.

Mr. YATES. How far is that from Jones Mills? How far is Bedford from Jones Mills?

Mr. CRONIN. Approximately 500 miles.

Mr. YATES. How do you get hot metal there?

Mr. CRONIN. Oh, we do not.

Mr. YATES. I misconstrued your statement.

Mr. CRONIN. Let me explain.

Mr. YATES. Yes.

Mr. CRONIN. The Jones Mills foundry is the only one that uses hot metal. The Bedford foundry uses pig.

Mr. YATES. I see.

Mr. CRONIN. In fact, at Jones Mills perhaps I should say that we get 2 kinds of metal there: hot metal and pig metal. The Reynolds operation operates 7 days continuously, and we make castings 5 days

a week normally. The other 2 days worth of hot metal are pigged for us by Reynolds and then shipped up to Bedford.

Mr. YATES. From whom do you buy your pig? Only from Reynolds?

Mr. CRONIN. Oh, goodness, no.

Mr. YATES. You buy your molten metal only from Reynolds?

Mr. CRONIN. Only from Reynolds.

Mr. YATES. From whom do you buy your pig?

Mr. CRONIN. We have contracts with Alcan, Anaconda, Kaiser, and while we have no contract with Alcoa, we have an allocation from them.

Mr. YATES. Are these firm contracts for the annual supply of metal, for maximum and minimum amounts of pig?

Mr. CRONIN. Not in the Alcoa case.

Mr. YATES. In the others it is?

Mr. CRONIN. In the others it is. In the Jones Mills contract, the total amount in the contract on an annual basis is 40 million pounds. Our must take part of it is 50 percent, or 20 million pounds. In the Massena contract, we have no stated minimum take. The contract provides that in that foundry we will take enough molten metal to run 50 percent of our Chevrolet transmission parts and 25 percent of our Chevrolet pistons; so that there is no specified number of tons or pounds that we have to take.

Mr. MULTER. Excuse me, Mr. Chairman. Does that mean if you should shut down the plant for 6 months, you would not have to take any metal during that period?

Mr. CRONIN. That is correct, Mr. Congressman.

Mr. YATES. Would you have to buy the equivalent in pig, the equivalent of the production of that plant from Reynolds then?

Mr. CRONIN. I assume that when Congressman Multer said if the plant was closed down there would be no requirement there and we would not be casting. Am I correct in that interpretation?

Mr. MULTER. Then you would cease to be a customer of that plant during that period that the plant was closed down. In other words, you would not take any metal from that plant of any kind, pig or molten metal?

Mr. CRONIN. That is correct.

Mr. MULTER. Under the contract, you have that right to close down for as long a period as you may want to and not take any metal? There is no minimum requirement and there is no maximum requirement?

Mr. CRONIN. That is correct. We would have to assume, of course, that the whole Chevrolet division would be closed down and Chevrolet would not be producing. If Chevrolet was operating at all, that plant would be required to take aluminum to the extent of 25 percent of the pistons required and 50 percent of the transmission parts, for whatever schedule Chevrolet was then operating under.

Mr. MULTER. I am sure that Mr. Riehlman and I are both disturbed to hear that.

Mr. YATES. They are both from New York.

Mr. MULTER. His impression, as mine was, both of us being from New York State, was that the contracts that were negotiated on the basis of which a low power rate was given in connection with these

plants, on the assumption and the premise that there would be this additional operation there going all the year round.

Mr. CRONIN. That certainly is our sincere hope, Mr. Congressman, our sincere hope. And I could only visualize an emergency, it would have to be almost a catastrophe, to find that plant without any work to do. In fact, the whole project is predicated on an ambitious, hopeful look for Chevrolet.

Mr. RIEHLMAN. Could I ask this question, sir? Do you anticipate using that plant for any other purpose than for producing parts for Chevrolet?

Mr. CRONIN. No.

Mr. RIEHLMAN. Well, in case of an emergency where there should be some drastic change in the production of Chevrolets, would General Motors then consider using it for other purposes?

Mr. CRONIN. It is not in our plan. However, we would make every effort to find a use for our investment.

Mr. RIEHLMAN. Let me ask you this question: Do you have any contract at all with the Canadian Aluminum Co. for hot aluminum?

Mr. CRONIN. No.

Mr. RIEHLMAN. Or molten aluminum?

Mr. CRONIN. No.

Mr. RIEHLMAN. Are you anticipating using molten aluminum in your Canadian plants at all?

Mr. CRONIN. Oh, we use some aluminum in our Canadian plant.

Mr. RIEHLMAN. I mean the same type of operation that you have with Reynolds.

Mr. CRONIN. No; we are not planning to.

Mr. YATES. You gave us a statement as to the companies from whom you bought pig and ingot. Do you buy any from other smelters, as, for example, scrap producers, people who sell you billets and pig? Scrap would not be for billet?

Mr. CRONIN. No.

Mr. YATES. Do you buy pig and ingot from any other producers?

Mr. CRONIN. We buy it from secondary producers, yes, but we do not buy scrap.

Mr. YATES. I mean ingots produced from scrap.

Mr. CRONIN. Yes.

Mr. YATES. Who else do you buy from?

Mr. CRONIN. I have here a list of Bohn Aluminum, Bohler-Jarviu.

Mr. YATES. You buy pig and ingot from them?

Mr. CRONIN. No. Pardon me. I am looking at castings. Pig ingot or slab, we might buy from Apex Smelting, Canada Metal, Christiansen Corp., Federated Metals, Plymouth Steel, W. F. Jobbins, and perhaps others.

Mr. YATES. That is not primary metal, is it? Do you buy virgin metal from them, from the last few whose names you gave?

Mr. CRONIN. It might be virgin. In most cases it is not. It is secondary. Most of our virgin is bought from the——

Mr. YATES. From the primary producers?

Mr. CRONIN. Primary producers.

Mr. RIEHLMAN. Mr. Chairman, could I ask this question.

In respect to your statement that you have on page 3 regarding the 1958 models where you are using 43.81 pounds, with 21.89 pounds fabri-

cated in your own plants and 21.93 pounds purchased outside General Motors, when your new plant at Massena is in operation in 1959, what is going to happen to that ratio? Will you be buying less aluminum from fabricators and from fewer fabricators outside General Motors?

Mr. CRONIN. It is not our expectation, and it is my sincere hope that we will continue——

Mr. RIEHLMAN. General Motors is not fabricating the parts at the present time, which are being used in the Chevrolet, is it?

Mr. CRONIN. A few of them we are.

Mr. RIEHLMAN. Are you not going to expand that operation when you open your plant at Massena?

Mr. CRONIN. Oh, yes, yes.

Mr. RIEHLMAN. Then naturally if that is true, you would certainly be eliminating some of the fabricators that you are now buying from?

Mr. CRONIN. Depending on volume at the time, and the growth.

Mr. RIEHLMAN. You do not anticipate the volume of Chevrolet to go down do you?

Mr. CRONIN. I beg your pardon?

Mr. RIEHLMAN. You do not anticipate the number of Chevrolets you are producing to go down?

Mr. CRONIN. Oh, I dare not.

Mr. RIEHLMAN. Certainly you would have to eliminate some of the fabricators, would you not, if you expanded?

Mr. CRONIN. Not necessarily.

Mr. RIEHLMAN. Or some of the volume would have to be eliminated then, would it not?

Mr. CRONIN. Assume our volume grows, and if our plans for the particular transmission that we are speaking of for our 1960 Chevrolet proves satisfactory in an engineering test, then we will have a growth in aluminum, new parts, new transmission parts, that will go into Massena and leave, I hope, the current trend of outside purchases and usage approximately the same.

Mr. RIEHLMAN. What you intend to do is expand the use of aluminum?

Mr. CRONIN. That is right.

Mr. RIEHLMAN. To take up the difference that you would be using in that plant?

Mr. CRONIN. That is right, both with respect to the aluminum used in an automobile and as I said earlier, I hope for a great growth in the number of automobiles.

Mr. YATES. From what other outside companies do you buy aluminum parts? You stated you bought them from 171 aluminum farbricators, and you bought such things as rods, bars, pig, molten metal. Can you break that figure down in the same way that Chrysler broke its figures down—by size of your suppliers?

Mr. CRONIN. No, I cannot.

Mr. YATES. You do not have that information?

Mr. CRONIN. No, I do not, Mr. Chairman. The only information I do have on those 171 suppliers is satisfactory data with respect to the growth from 1954 by years to 1958. In 1954 we had 112 such suppliers.

Mr. MULTER. How many, sir?

Mr. CRONIN. One hundred and twelve. In 1955 that grew to 126, in 1956 to 135, in 1957 to 152 and in 1958 to 171, or approximately a 10-percent growth each year in the number of outside suppliers.

Mr. YATES. The reason for my question is the fact that this is a small-business committee, and we wondered as to whether or not in this growing number of suppliers there were small businesses that you were buying material from or whether they were as you started to say in connection with the castings that you bought, firms of the size of Bohn Aluminum or Revere or some of the others?

Mr. CRONIN. I did have time to analyze the 171 suppliers against our 1955 list of suppliers, which was a thorough and complete compilation by number of employees, and I found that 60 to 65 percent of these 171 suppliers are small business under the definition of 500 employees or less.

Mr. MULTER. That is a very bad definition. We have been saying that in this comimttee now for 6 years that I know of and issuing reports year after year. Every Congress for the last 3 Congresses has issued reports that that is a bad definition and a wholly unfair description of our small-business industry when you take the definition of 500.

As a matter of fact, I think you will find that anything over 250 among your suppliers is big business, looking at it just from the number of employees.

Mr. YATES. I am sure that Mr. Cronin is not to be criticized for using that test.

Mr. MULTER. Oh, no, I am not being critical of him.

Mr. YATES. He was using the Small Business Administration test.

Mr. MULTER. I am being critical of the Small Business Administration for not having changed the definition and of the Defense Department for not having changed the definition. We changed it by law. The law originally providing 500 was enacted during the war years. It was an arbitrary definition prompted by the emergency conditions.

We have since repealed that law. We have not been able to get the Defense Department or the Small Business Administration to repeal it.

Mr. CRONIN. The reason I mentioned 500 is because under our agreement with the services on defense contracts, we are required to distribute——

Mr. YATES. We hope that you will be able to amend that definition very shortly, because we do not think it is a very good definition. But that is something that you are not responsible for. It is something that is within our province and that of the Defense Department.

Mr. CRONIN. I was going to say I thought I was pretty helpless to change the definition.

Mr. MULTER. No more helpless than we are.

Mr. YATES. Let us get back to Mr. Kettering. He is a very great man whose ideas deserve great consideration. You say that the test at Jones Mills proved successful. What do you mean by that? Successful in what sense? Did you find as a result of it that you were saving money, that it helped reduce your costs, that it increased profit? What did this test show?

Mr. CRONIN. Well, to begin with, I think that initially Mr. Kettering, Mr. Evans, Mr. Kyes, who were in on the decision to have a go at hot metal, felt that there was a challenge to General Motors to see what could be done to improve the art of aluminum casting foreseeing the day not far away when our use of aluminum would increase.

First we put a little pilot line in at Jones Mills to see what we could do, and that seemed successful in terms not necessarily of saving money and operating efficiently, but in terms of success in doing the process.

I should state that there are obstacles to economic success in having a plant either at Jones Mills or at Massena. The user who agrees to a hot-metal contract, I should say, does not select the geography of the plant. He must go where there is an aluminum-reduction plant. And it goes without saying that neither Jones Mills nor Massena is near the center of our geographic use of the castings that are produced there.

Mr. YATES. Why did you not put in your own plant then? General Motors presumably has enough money to put in its own line. Why did you then go to Massena if it is not in an appropriate geographical location and although the results of your test at Jones Mills has shown that this is an operation that you should perform? Why did you not put it in the most economic location?

Mr. CRONIN. We did not have the opportunity in Massena.

Mr. YATES. You mean Reynolds was already there?

Mr. CRONIN. No. Reynolds was not at Massena at the time, but Reynolds was negotiating a power contract with the New York Power Authority, and I believe had options on the land.

Mr. YATES. Where would be the most economic locations—in Detroit? Would that be the most economic location for such a plant?

Mr. CRONIN. When I speak of the distribution, the geographic center, I would select a spot in Ohio or in Michigan in order to save the freight costs, the excess freight costs of moving finished castings from Jones Mills or Massena to the point of use, over the cost of moving pig an equivalent distance.

In addition to that——

Mr. YATES. I wonder why, then, you did not build your own plant?

Mr. CRONIN. Why then we would be in the aluminum business.

Mr. YATES. For your own needs? The history of the automobile business is one in which the company purchases its supplies from time to time when they can use them. I remember, for example, that Chrysler took over the Briggs Body Co. at one time, and I remember that you have taken over various companies. Why, then, should you not build your own plant? You would not be in the aluminum industry. Presumably you would be engaging in a further vertical integration, would you not?

Mr. CRONIN. Not if we had to buy bauxite and convert it to alumina and then into molten metal. It would seem to me that we would then be in the aluminum business.

Mr. YATES. It is cheaper then to buy the metal from Reynolds instead of putting in your own plant?

Mr. CRONIN. I have never analyzed those costs, Mr. Chairman.

Mr. YATES. I am sorry about this deviation. It seemed to me, though, that when you talked about the fact that it was not in the most economic location, I thought it strange that General Motors should not locate its plant in the most economic location.

Mr. CRONIN. We probably would if the reduction plant were more centrally located. But in addition to our higher freight costs of shipping finished castings from Massena and Jones Mills, we have a problem—which I am sure Congressman Multer will appreciate—that the north country around Massena is not industrialized.

Mr. MULTER. Mr. Riehlman is hoping that it will be. That is near where he lives.

Mr. RIEHLMAN. It is moving that way rapidly, sir.

Mr. CRONIN. I hope that we can make a contribution to that growth.

Mr. RIEHLMAN. I sincerely hope so, and I am sure you will.

Mr. MULTER. And I think it will help New York City, too.

Mr. CRONIN. I am sure it will. But in the meantime, we have a job of getting a labor force and thinning out, I might say, our technical folks and spreading them from Massena to Jones Mills to our technical center, in order to spread the know-how and technology.

Mr. MULTER. What assembly plants does Chevrolet now have in the East?

Mr. CRONIN. Tarrytown, N. Y., is the largest one, I think, in the East.

Mr. MULTER. You have several others, though, too, in the East, do you not?

Mr. CRONIN. Oh, yes. We have BOP assembly plants at Framingham, Wilmington, and at Linden, N. J.

Mr. MULTER. Actually you are going to save freight by having these parts made in Massena, and instead of shipping ingots and pig and having it made out in Detroit or somewhere else and then shipping the part to these assembly plants, you are going to have less freight when you take the metal at Massena and then ship the parts to these assembly plants?

Mr. CRONIN. Hardly, because the only point of advantage will be Tonawanda, N. Y. These castings will all have to go not to the assembly plants but to the engine and transmission plants in Flint, Cleveland, Toledo, Tonawanda, and Saginaw.

Mr. MULTER. I guess the price is going to go up again instead of down.

Mr. YATES. Continue as to the reasons why you decided to go into the hot metal contract. You started out by saying there were certain disadvantages. You never got around to giving us the advantages.

Mr. CRONIN. The advantages were an assured source of supply on a continuing basis, and what we thought was an attractive cost.

Mr. YATES. Is the cost factor more attractive?

Mr. CRONIN. Yes; the purchase price is lower.

Mr. YATES. In the manufacturing process?

Mr. CRONIN. On a per pound basis. I have never run a study of the added cost of holding the hot metal in our furnaces. Say, take the output of 1 day's potline and converting it into pig versus continuing the process direct from hot metal, and allowing for the added freight costs and loss of organizational efficiency previously mentioned.

Mr. YATES. For my own edification, Mr. Cronin, tell me how this process will work in the plant. Reynolds will make the metal in the first instance. They will use alumina, having made that from the bauxite, and you will give them the chemical formula for use in the hot metal that is to be produced; will you not?

Mr. CRONIN. Yes, sir.

Mr. YATES. They will then flow the hot metal into your plant, which is right adjacent to theirs?

Mr. CRONIN. No. We will go over and get it in an over-the-road truck, in a big thermos bottle, jug.

Mr. YATES. You mean it will not flow through?

Mr. CRONIN. Oh, no, no.

Mr. YATES. You see, I have no picture of the location of the plants.

Mr. CRONIN. Yes.

Mr. YATES. Are the plants intended to be up against each other, or will they be separate?

Mr. CRONIN. There is a distance. Let me see if I can estimate it. From the point where we pick it up to the point where we deliver the contents of this thermos jug into our holding furnaces will be, oh, my estimate is around a half to three-quarters of a mile.

Mr. YATES. This is the first I have heard of a thermos truck. I did not know that you could convey molten metal.

Mr. CRONIN. Oh, yes.

Mr. YATES. Hot metal in a truck?

Mr. CRONIN. Oh, yes.

Mr. YATES. Sort of like a truck in which you convey oil?

Mr. CRONIN. Oil or milk.

Mr. MULTER. Instead of it being refrigerated, it is heated?

Mr. CRONIN. No, just insulated. The steel mills use the same method with hot steel.

Mr. YATES. Then I do not understand why they deduct the freight factor from your price, because you are a distance away, are you not?

Mr. CRONIN. They do not ship the molten metal. We pick it up in our own containers.

Mr. YATES. How far is your plant from their plant?

Mr. CRONIN. Pardon?

Mr. YATES. Your plant will be half a mile from their plant and you will send over these trucks to pick up the hot metal?

Mr. CRONIN. Yes.

Mr. YATES. And they are selling you the molten aluminum and you then bring it back. Who determines the chemical content? Can you change it when it gets to your furnaces?

Mr. CRONIN. Yes; in almost every case or in cases where our specification calls for the use of magnesium, we put in the magnesium on our side.

Mr. YATES. I see.

Mr. CRONIN. Copper, ferromanganese, and silicon are put in by Reynolds.

Mr. YATES. You tell them what to put into the formula initially?

Mr. CRONIN. Yes.

Mr. YATES. And then you will pick it up in these thermos trucks?

Mr. CRONIN. Take it over to our plant and put it in the furnace, transfer it to a ladle, run the ladle down the line, pour it into our diecasting machines in the hot stage.

Mr. YATES. How far can one conveniently transport hot metal? Suppose you were 2 miles away or 3 miles or 5 miles away. Could you transport hot metal that distance?

Mr. CRONIN. Oh, yes.

Mr. YATES. Can you tell us how far one can do it?

Mr. CRONIN. Not accurately. I can give you an estimate.

Mr. YATES. All right.

Mr. CRONIN. It would be practical to transport it for such a length of time as to pour it out in an hour and a half. Now, whether that is 10 miles or 15 or 25——

Mr. YATES. You know, your testimony this morning is very interesting. I get a new and completely different picture of this process now, and I think I can see some basis for Mr. McConnell's testimony yesterday that this is a fourth product that is being sold.

Pig, ingot, and billet are usually considered the three basic products of a primary aluminum manufacturer; but now, if you can transport this hot metal, I can see that a company could sell it and ship it to an outside company, something which I had not contemplated before.

Mr. MULTER. Mr. Chairman, it is still not a fourth product. It is the same product in a different form, just as you can presently transport a gas or a liquid or a solid. It is still the same product in a different form.

I can easily foresee that just as today you use your refrigerated freight car, you might be able to use a thermos freight car to transport this flowing metal or this hot metal for great distances, if you have a measure of keeping the same temperature of the metal during transportation.

We got a different picture yesterday. Yesterday, it seemed to us from Reynolds' testimony that this was to be a continuous process 7 days a week, 24 hours a day.

Mr. CRONIN. It is.

Mr. MULTER. Keeping the metal running and flowing?

Mr. CRONIN. It is.

Mr. MULTER. Keeping it flowing all the time?

Mr. CRONIN. It is. It is a continuous, 7-day operation for Reynolds, but a 5-day operation for us. In other words, we do not work 7 days.

Mr. YATES. On two of the days, Reynolds will make pig for its own use?

Mr. CRONIN. No; for our account.

Mr. YATES. Oh, you will buy pig?

Mr. CRONIN. Oh, yes. You see, we buy two kinds of metal under this contract.

Mr. YATES. You buy pig and you buy molten metal?

Mr. CRONIN. We buy molten metal and use it 5 days a week, if that is the number of days we are casting in our plant. The other 2 days, Saturday and Sunday, for example——

Mr. YATES. Where will the pig be used?

Mr. CRONIN. At Bedford.

Mr. YATES. At Bedford, Ind.? Will it not be used in your plant at Massena?

Mr. CRONIN. Oh, no.

Mr. YATES. Is it possible that some of the pig may be used in your plant at Massena?

Mr. CRONIN. No.

Mr. YATES. Did you say "No" to that?

Mr. CRONIN. It would be highly improbable and very impractical to move it up to Massena in pig form.

Mr. YATES. In other words, the only metal you contemplate using at this particular time is the molten metal?

Mr. CRONIN. Oh, yes.

Mr. YATES And not using the pig?

Mr. CRONIN. Not using pig.

Mr. MULTER. Five days a week you will be transporting by truck, thermo truck, the hot metal from the Reynolds plant to your plant. The other 2 days a week, when you are not casting, what happens to the hot metal?

Mr. CRONIN. Reynolds converts it into pig; ships the pig to our Bedford foundry for our account.

Mr. MULTER. Thank you.

Mr. YATES. You pay a different price for that?

Mr. CRONIN. Oh, yes.

Mr. YATES. You pay the published price for the pig?

Mr. CRONIN. That is right.

Mr. YATES. And what is your price for the molten metal? Is it the published price less the freight factor and less a 10-percent discount?

Mr. CRONIN. May I read from our contracts?

Mr. YATES. Yes; you may.

Mr. CRONIN (reading):

The price of molten metal delivered hereunder at seller's reduction plant located at Jones Mills, Ark., shall be computed on the basis of the following formula: The list price of 99-plus pig which is to be established on the basis of the Engineering and Mining Journal average for the month preceding——

Mr. YATES. May I interrupt you, Mr. Cronin? Are you reading from a contract which was introduced in the record yesterday? What is the date of the contract you are reading from?

Mr. CRONIN. This is dated the 23d of July 1952.

Mr. YATES. That contract has already been introduced into the record, and you would be reading what paragraphs?

Mr. CRONIN. Section 3, under "Price."

Mr. YATES. We already have that in the record, and I do not think it is necessary for you to read all of paragraph 3.

Mr. CRONIN. All right.

Mr. YATES. There is an amendment to that contract, is there not, to bring the price down to date? Or am I in error on that? Was that contract amended for the Massena operation?

Mr. CRONIN. It was amended, but I do not believe——

Mr. MULTER. September 26, is it not?

Mr. CRONIN. September 26, 1955, the contract was amended. The words in the pricing paragraph were changed.

Mr. MULTER. Did the formula remain the same?

Mr. CRONIN. No change in the formula.

Mr. YATES. I have here what purports to be a copy of your contract dated September 26, 1955, with Reynolds Metals. Can I show this to you? Is that a copy of the contract you have? If it is, it may go into the record at this point.

Mr. BOONE. I can tell you in a minute, because I drew it.

Mr. MULTER. May I suggest, Mr. Chairman, it be received for the record, subject to correction, if there is any correction.

Mr. YATES. He is checking to see if it is an exact copy.

Mr. BOONE. Mr. Multer, this is a photographic copy.

Mr. YATES. Without objection, it may be received in the record.

(The contract referred to is as follows:)

AGREEMENT OF AMENDMENT

This Agreement of Amendment dated this 26th day of September 1955, between Reynolds Metals Company, a Delaware corporation, with a place of business at Jones Mills, Arkansas (hereinafter called Seller) and General Motors Corporation, a Delaware corporation, with a place of business at Jones Mills Arkansas (hereinafter called Buyer);

Witnesseth:

Whereas the parties hereto have entered into an agreement which is dated July 23, 1952, which provides in substance that Buyer will purchase from Seller and Seller will sell to Buyer certain quantities of molten aluminum alloys at their Jones Mills, Arkansas, Plants; and

Whereas the parties have found it to be desirable and necessary to amend the said contract;

Now, therefore, in consideration of the premises and the mutual promises herein contained, the parties agree:

1. That the said contract dated July 23, 1952, between the parties shall be amended in the following particulars, and only in those particulars.

2. That paragraph II entitled "Specifications" of the said contract shall be omitted and in lieu thereof there shall be inserted the following:

"(a) The analysis of the alloyed molten metal to be supplied hereunder shall be certified by Seller and checked by Buyer to be as per specifications to be supplied from time to time by Buyer.

"(b) Upon twenty-four (24) hours' notice from Buyer to Seller, in writing, if practical, or upon such further period of time as may be agreed to by the parties hereto (the parties hereby agreeing to negotiate in good faith concerning any extension of the said period), the specifications may be changed from time to time so as to increase or otherwise add to the various elements in the pot lines, excepting, however, magnesium which will be added by Buyer in its open hearth."

3. That paragraph III entitled "Price" of the said contract shall be omitted and in lieu thereof shall be inserted the following:

"The price of molten metal delivered hereunder at Seller's reduction plant located at Jones Mills, Arkansas, shall be computed on the basis of the following formula:

"(The list price of 99 plus pig, which is to be established on the basis of the American Metal Market average for the month preceding the month in which deliveries are made) less (the average freight cost to Seller of all shipments of aluminum pig during the calendar quarter preceding the quarter in which deliveries are made; such average freight costs shall be computed by using all shipments of pig by Seller, including shipments between Seller's plants and shipments to others, except for shipments or transfers between Seller's plants on which Seller incurs no freight costs. Computations shall be made at the end of each calendar quarter. No change will be made in freight allowance unless quarterly computations show a change of at least 0.05 cent per pound in average freight costs from that being used and then, in that event, a change in allowance will be made equivalent to the change in average freight cost. Changes, if any, shall become effective one month following the end of the quarterly computation. For instance, if a computation at the end of March shows that the freight allowance should be changed, the change will become effective on the first of May) less (10 percent multiplied by the aluminum content) plus (the percentage of other elements multiplied by their respective market prices which are to be established on the same basis as 99 plus pig with the exception of copper. Copper shall be included at average cost to Seller of copper for alloying purposes at its Jones Mills Plant during the preceding month)."

4. That article IV entitled "Payment" of the said contract shall be omitted and in lieu thereof shall be inserted the following:

"At the close of business each Wednesday (which is defined to be Thursday at 8 a. m.), Seller shall prepare an invoice to cover the molten metal delivered during the preceding week, except on month ends not falling on Wednesday. Then there will be two invoices rendered for payment; one covering the remaining days in the month from the preceding Wednesday (as defined), and the other covering the necessary days in the new month to complete a week's billing.

"Upon certification of quantities of molten metal received, payment shall be made by Buyer within ten (10) days of receipt of invoice covering the preceding week's deliveries.

"Payment for aluminum pig delivered to Buyer in accordance with the provisions of paragraph V hereof shall be made on the 10th and 25th prox.

5. That paragraph V entitled "Delivery Authorizations" of the said contract shall be amended by adding the following paragraph thereto:

"Buyer shall furnish Seller with a written sixty-day schedule of aluminum requirements on the eighth day of each month preceding the month of delivery. The first thirty (30) days set forth in such schedule shall be considered a firm schedule, and the second thirty (30) days will be a forecast of estimated requirements which will be made firm on the eighth day of the following month. Seller shall have a period from the eighth of each month until the first day of the subsequent month to commence deliveries of that quantity of molten aluminum as set forth by notice from Buyer."

6. That inasmuch as paragraph V entitled "Delivery Authorizations" of the said contract states that the effective date of the contract for the purposes of article VII of the said contract shall be the first date upon which Buyer gives notice to Seller to commence deliveries, the parties agree that it is desirable to set the effective date. Therefore, the parties have agreed that for the purposes of paragraph VII entitled "Term" of the said contract, and for all other purposes, the effective date shall be considered January 1, 1954.

7. That inasmuch as General Motors has formerly raised some question concerning the meaning of the term "Buyer" as that word is used in the said contract, and particularly as it is used in paragraph V thereof, the parties agree that it means General Motors Corporation as a whole and is not limited to any particular plant or division thereof.

In witness whereof, the parties hereto have caused this instrument to be executed by their duly authorized officers as of the day and year first above written.

REYNOLDS METALS COMPANY,
By DAVID P. REYNOLDS.

Attest:

FRED R. EDNEY, *Assistant Secretary.*

GENERAL MOTORS CORPORATION,
By C. R. OSBORN, *Vice President.*

Attest:

J. C. DAVIDSON, *Assistant Secretary.*

Mr. YATES. There seems to be some question here as to whether or not pig is shipped from your Jones Mills operation to your Bedford plant. Is it? Does Reynolds make pig at Jones Mill which is shipped to your Bedford plant? He asked you about Massena. I have an inquiry here as to whether it is shipped to your Bedford plant from Jones Mills.

Mr. CRONIN. Yes; from the Reynolds plant at Jones Mills.

Mr. YATES. What is the price that you pay for that pig?

Mr. CRONIN. The regular published price, currently 26 cents.

Mr. YATES. The word in the automobile industry or the word among the purchasers of automobiles is that Chevrolet is the guinea pig for General Motors. Is this a test you are conducting at Massena to determine whether or not this type of an operation will be feasible throughout all your branches, throughout all your automobile divisions?

Mr. CRONIN. Oh, no; not by any means, Mr. Chairman.

Mr. YATES. This will just serve Chevrolet? What happens to Cadillac and Buick? Buick, of course, is boasting of its great use of aluminum.

Mr. CRONIN. Yes.

Mr. YATES. I will not use the word "bragging," but boasting about the fact that this is the B–58.

Mr. CRONIN. Oh, yes; our Buick folks are very boastful.

Mr. YATES. This is the new aluminum car?

Mr. CRONIN. Yes.

Mr. YATES. There is a greater use of aluminum in the advanced engineering design of a 1958 Buick. I guess Chrysler could have gone you one better on that; could they not?

Mr. CRONIN. In many of the Buick models except the Special, they will average close to 100 pounds of aluminum. The figures I gave were a composite of all of our cars.

Mr. YATES. You mean Buick may use as much as 100 pounds of aluminum?

Mr. CRONIN. Oh, yes.

Mr. YATES. You gave us just the average number?

Mr. CRONIN. Yes.

Mr. YATES. Forty-five pounds is just an average?

Mr. CRONIN. That is correct.

Mr. YATES. Composite average. You would not know how much aluminum Buick uses? I would be interested to know what is the maximum amount of aluminum used in any one of your cars.

Mr. CRONIN. It has been said that there is 250 pounds in our Cadillac Eldorado brougham.

Mr. YATES. 250 pounds?

Mr. CRONIN. Yes.

Mr. YATES. That is not sold generally throughout the country, is it?

Mr. CRONIN. Well, it is sold generally throughout the country. I mean we would be glad to deliver them.

Mr. YATES. You do not sell as many of those as you sell Chevrolets?

Mr. CRONIN. No, not quite, unfortunately.

Mr. YATES. What is the next car that uses the most aluminum? The Buick, probably; is it not?

Mr. CRONIN. The Buick, probably.

Mr. YATES. And what has been said about the use of aluminum in that car?

Mr. CRONIN. Of course, we would have to read Buick's ads.

Mr. YATES. Well, I read it and I do not remember the amount.

Mr. CRONIN. The photograph that I attached to my statement was all of Buick's parts, and I believe those parts add up to something like 108 or 110 pounds.

Mr. YATES. What will happen as a result of this new technique of using hot metal? What will happen to your 171 suppliers? Will that number be reduced?

Mr. CRONIN. I do not expect so. In fact, it is my sincere hope that that number will grow as time goes on.

Mr. YATES. What happens to companies that supply you with secondary ingot? Will you still be buying secondary ingot from them?

Mr. CRONIN. Oh, yes.

Mr. YATES. And the diecasters—will you still be using diecasters?

Mr. CRONIN. Oh, yes.

Mr. YATES. To the same extent?

Mr. CRONIN. It is my hope.

Mr. YATES. You hope for an expansion of the automobile business to the point where you will be able to use at least as many of the outside firms as you are using now?

Mr. CRONIN. That is correct; including anticipated increase in the amount of aluminum per car.

Mr. YATES. Would you not get more business if your prices were reduced instead of being increased? Is there not a hope for that in the future? I am asking this question as a consumer myself and for all the other consumers.

Mr. CRONIN. I have heard it stated.

Mr. YATES. What is your opinion? Do you think there is a chance of prices of automobiles going down?

Mr. CRONIN. Not with the general trend of prices upward for everything.

Mr. YATES. Does General Motors, to your knowledge, own any bauxite mines?

Mr. CRONIN. No, sir.

Mr. YATES. Does General Motors have any facilities for making primary metal?

Mr. CRONIN. No, sir.

Mr. YATES. In your contracts with Reynolds, do you have any option to buy any of their plants?

Mr. CRONIN. No, sir.

Mr. YATES. You do not contemplate that General Motors will be taking over the Reynolds Co., as you have other plants in the past?

Mr. CRONIN. No, sir.

Mr. MULTER. In 1952 when you decided the pilot-plant operation at Jones Mills was a practical operation and went into full operation there, you then put to work some 275 people at that location?

Mr. CRONIN. I mentioned that as about the average employment at Jones Mills.

Mr. MULTER. Now, as a result of that operation, did you dispense with any of your suppliers?

Mr. CRONIN. No. We dispensed primarily with the making of gray-iron castings in our own foundries.

Mr. MULTER. Could you get up for us and submit to us a tabulation showing the number of supplies with 100 employees and less, the number of suppliers with 100 to 250 employees, and the number of suppliers with more than 250 employees, and also the aggregate amount of business done with each of those three classifications during the years 1956 and 1957?

Mr. CRONIN. Let me see if I understand. For the years 1956 and 1957 and with respect to our 171 suppliers, a breakdown of the number who have employees numbering 1 to 100; second, 100 to 250; and third, over 250?

Mr. MULTER. Yes.

Mr. YATES. Up to 500?

Mr. MULTER. No.

Mr. DALMAS. Mr. Chairman, because of the 500 rule, should we not have the break between 250 and 500 also, and then over 500? Zero to 100, 100 to 250, 250 to 500, and over 500?

Mr. MULTER. Yes; give us the classification of 250 to 500, and then over 500, and then the aggregate dollar amount of business done with each of those 4 classifications.

Mr. CRONIN. I believe that can be supplied.

Mr. MULTER. We would appreciate it is you could get that to us.

(This material appears in the appendix, p. 467.)

Mr. MULTER. Now, I assume—correct me if I am wrong—that none of these 171 suppliers is owned or controlled by General Motors?

Mr. CRONIN. None of them.

Mr. MULTER. Am I also safe in assuming that there is no proprietary or stock interest of General Motors in any of these supplier companies?

Mr. CRONIN. That is correct.

Mr. MULTER. Does General Motors have any proprietary stock interest in any of the aluminum companies—Reynolds, Alcoa, Kaiser?

Mr. CRONIN. Not to my knowledge.

Mr. MULTER. That goes for Harvey and Alcan?

Mr. CRONIN. Yes.

Mr. MULTER. And Anaconda?

Mr. CRONIN. That is correct.

Mr. MULTER. In talking about your Alcoa contract, in talking about your purchases from Alcoa, you indicated you have no contract there but you have an allocation.

Mr. CRONIN. With Alcoa?

Mr. MULTER. Yes.

Mr. CRONIN. Yes; we have no formal written contract, as we have in the other instances that I mentioned, but we have a buyer-supplier agreement that they will furnish us on demand.

Mr. MULTER. A particular percentage of your needs or a particular percentage of their production?

Mr. CRONIN. Up to 17,400,000 pounds a year.

Mr. MULTER. So that upon demand from General Motors, they must supply you with that quantity of pig?

Mr. CRONIN. Yes, that is pig.

Mr. MULTER. What about the price?

Mr. CRONIN. Published price, the regular price.

Mr. MULTER. And your contracts with Kaiser and Anaconda and Reynolds all call for published price, except for hot metal?

Mr. CRONIN. Oh, yes, sir.

Mr. MULTER. And your hot metal price is based on published price, too? It is part of the formula?

Mr. CRONIN. That is correct.

Mr. MULTER. What about Alcan? What is the price there?

Mr. CRONIN. Published price.

Mr. MULTER. The reason for incorporating in your contracts the published price was so that you would get the advantage, General Motors would get the advantage of any reduction of price, and the seller would get the advantage of any increase in price; am I right, sir? It is a reciprocal benefit so that if the price goes down General Motors gets the benefit of the decrease in price, and if the price goes up, you pay the increased price, am I right?

Mr. CRONIN. That is correct.

Mr. MULTER. Is it not strange, has it not occurred to General Motors that it is strange that the price, the published price, has always been identical whether it is Alcoa, Anaconda, Kaiser, or Reynolds?

Mr. CRONIN. It is a coincidence that I think we have to live with in the purchase of aluminum.

Mr. MULTER. Do you have to live with it? Have you made any inquiries as to why it is identical? All these plants are operating in different places and we are told there are different wage scales in

these different places. Obviously the freight costs are different, not the freight rates necessarily, but there are different amounts for the freight to bring the bauxite from a farther point to a plant and then to process it. There must be some difference in the cost. In one plant they are producing 58,000 tons; another place, another plant produces 200,000 tons. There must be some difference in efficiency and cost of operation.

Have you not made any inquiry as to why the price is identical from all these sources of supply?

Mr. CRONIN. Not as to why the prices are identical. Why the price is as it is. As a buyer, I am interested in getting the best price possible, so that I am constantly on the lookout to save money.

Mr. MULTER. What answer do you get to these queries that are puzzling me, particularly today we are told there is a greater supply than there is a demand? I can understand where the demand exceeds the supply the seller is in a position to say, "Look, under the free-enterprise system, you will have to pay me what the traffic will bear." But that does not exist today. The supply exceeds the demand.

Why should you have to pay the identical price in each place?

Mr. CRONIN. As a buyer I only know that I must be submissive after I have done my best to negotiate a better price, submissive to their quotations. And if I need their product, I have to pay for it. We do the best job possible in our negotiations to get the best price possible.

Mr. MULTER. What inquiries, if any, have been made on behalf of General Motors of these companies as to why the price coincidentally is always the same?

Mr. CRONIN. To my knowledge, no such inquiry has been made.

Mr. MULTER. The price at the Massena plant is also published price with a differential fixed by the formula for the hot metal?

Mr. CRONIN. Yes, that is correct.

Mr. MULTER. Thank you, Mr. Chairman. Thank you, Mr. Cronin.

Mr. YATES. Mr. Riehlman?

Mr. RIEHLMAN. No questions.

Mr. YATES. I have 1 or 2 more questions. Did you before entering into the contract with Reynolds have any discussions with the other primary producers to find out whether they would furnish hot metal to you?

Mr. CRONIN. Before we entered into the Massena contract.

Mr. YATES. You did?

Mr. CRONIN. We did, yes. I talked to Kaiser and Alcoa. As Mr. Rhoades said yesterday, he is not ready today and he was not ready at that time. Both of them at that time were busy with expansions, Kaiser at Chalmette and Alcoa at Ravenswood, and because of their heavy financial obligations and the job of getting the facilities working, they passed at that time.

Mr. YATES. Were they willing to offer you the same deal that Reynolds was?

Mr. CRONIN. Our negotiations did not reach a pricing stage, Mr. Yates.

Mr. YATES. If there are no further questions, the committee thanks you, Mr. Cronin, for your very enlightening and illuminating testimony. We are grateful to you.

Mr. CRONIN. Thank you.

Mr. YATES. Mr. Ward, please, from Ford Motor Co.

Good morning, Mr. Ward.

Gentlemen, we have with us Mr. Earl Ward, who is a vice president in charge of purchasing for the Ford Motor Co. We are pleased to have you, Mr. Ward, and if you have a statement at this time, you may proceed.

TESTIMONY OF EARL WARD, VICE PRESIDENT, PURCHASING, FORD MOTOR CO.; ACCOMPANIED BY GENE KNUTSON, PURCHASING DEPARTMENT; AND DONALD QUAIFE AND RICHARD I. FRICKE, COUNSEL

Mr. WARD. My name is Earl Ward, employed by Ford Motor Co. I am vice president, purchasing. I have with me today Mr. Gene Knutson, Donald Quaife, and Richard I. Fricke.

Mr. Chairman and members of the committee, I appreciate very much this opportunity to tell you something of our plans for using aluminum in our products at Ford Motor Co.

As I understand it, your committee is interested in the supply and demand outlook for aluminum over the long range. The predominant use of aluminum by the company is in its production of passenger cars and trucks, although relatively small quantities are also used in its tractor engines. I will, therefore, direct my remarks primarily to our anticipated uses in the automotive field.

As you undoubtedly are aware, for many years aluminum has been a useful material in the manufacture of automobiles and trucks. For a number of years it has been recognized as a highly desirable material in the manufacture of pistons. Other automotive uses, such as cylinder heads and front-engine covers, antedate this development. In recent years, however, with the improvement in aluminum alloys and techniques for fabrication of aluminum, and with the developing demands for a material having the properties that aluminum possesses, there has been an increasing usage of this metal in both passenger cars and trucks.

Our records indicate that the weight of aluminum used in the manufacture of Ford cars averaged 17 pounds in 1950. At that time, consideration was being given to expanding the role that this versatile metal would play in our products. When the Korean conflict disrupted the normal flow of materials, however, any plans for expansion of the use of aluminum had to be curtailed.

When civilian supplies of aluminum became more freely available in 1954, we specified additional aluminum casting for the components of our automotive transmissions and employed additional aluminum on other parts of our vehicles. By 1955 Ford-model cars utilized an average of 32 pounds of aluminum and by 1957 this amount had increased to 35 pounds. Our new 1958 Fords, by comparison, utilize an average of 48 pounds of aluminum, an increase of 50 percent over 1955. The comparable figures for our new medium and higher priced models are 55 and 73 pounds, respectively.

In connection with the design of the automobiles and trucks to be produced by Ford Motor Co. in future years, we are giving constant consideration to the use of aluminum for the many parts of the vehicle where its properties may be advantageous. The extent to which

aluminum will be used is dependent, of course, upon a number of factors, including the technological developments in the industry. Styling trends obviously enter into the picture, as does the question of the relative economy of the metal as compared with an alternative material where either one would be equally suitable from functional and styling standpoints.

In addition, the increase in demand for passenger cars, which should come about in the future with the increase in population as well as the continued trend toward suburban living, would naturally result in more demand for aluminum even if the present metal usage per vehicle were to remain constant.

The various members of the aluminum industry, as well as our own engineering staffs, are constantly studying new applications for the use of this material in passenger cars and trucks and are working on the solution of technological problems which prevent its current use for certain purposes.

In addition, our suppliers are continually bringing to our attention possible new applications for the material. Among the suggestions that have been made are those relating to the use of aluminum for front and rear bumpers, major engine castings, exterior body skin, and integral wheel and brakedrum castings. Recognizing that the properties of aluminum make it desirable for broad application in automotive vehicles, we have been considering its use in several categories as follows:

ELECTRICAL PARTS

Since aluminum is second only to copper as a reasonably priced metallic conductor of electricity, our development engineers have worked on several projects involving the use of aluminum for this purpose. The potential applications involve wiring and battery cables, generator and starter coils, and other component parts of electrical accessories.

COMPONENTS INVOLVING HEAT EXCHANGE

Aluminum also has fine thermal conduction properties which we believe will find a place in auto radiators, heaters, air conditioners, and oil coolers. Development work in this area has progressed satisfactorily, indicating that there is significant potential for aluminum in these products.

DECORATIVE TRIM

More and more applications of aluminum are made in the styling area. Aluminum fabricators have come up with highly acceptable style tones and designs in anodized aluminum. We now have on our current products side body ornamentation of anodized aluminum as well as grilles, lamp bezels, and other exterior trim parts.

STRUCTURAL AND FUNCTIONAL PARTS

Aluminum has long been a popular material for die and permanent mold castings, and for this purpose is superior to other metals in many respects. Where strong, lightweight, thin-walled castings with close tolerances are required, we generally specify aluminum alloyed mate-

rial. The many aluminum castings now made for our engine and transmission assemblies are examples of this application. We envisage the possibility of further application of aluminum castings to these products. In addition, it is quite possible that we will find aluminum castings economically and functionally advantageous for use in such products as power-steering and power-brake assemblies and for certain chassis parts.

As I have mentioned previously, there are technological problems that must be solved before some of these potential applications can be realized. In view of this fact and the other factors which affect the use of aluminum in competition with other metals and materials, it is impossible to predict with assurance the extent of aluminum usage in the car of the future. On the basis of our best projections, however, it is our belief that such cars will contain substantially more aluminum than the models we are now producing. Our plans for the immediate future are indicative of this trend, for it is estimated that the aluminum content of our 1959 models will increase approximately 10 percent over 1958.

In 1955, after an appraisal of the aluminum situation in relation to automobile production, Ford Motor Co. foresaw its accelerating need for this material, with the predominant requirements in the casting area. It seemed evident that secondary aluminum could not be relied upon as a dependable source for satisfying this need, since the forecasted maximum requirements of castings for Ford Motor Co. alone would absorb more than 25 percent of the total annual supply of secondary aluminum. Obviously, the impact of purchases of secondary aluminum of this magnitude would have a considerable influence on its price.

After canvassing the available possibilities, there appeared to be definite advantages from the standpoint of operating efficiency in locating a casting plant adjacent to an aluminum production plant, so that the molten metal from the aluminum plant could be introduced directly into the casting operations, to the extent feasible, without the necessity of pigging and reheating the metal.

As a measure of our confidence in the future of aluminum in our automotive products, we entered into a 10-year contract with Reynolds Metals Co. under which Ford constructed a casting plant and Reynolds added new capacity to its primary aluminum facilities in Alabama and agreed to sell us a quantity of molten aluminum from its output.

Ford also increased its aluminum parts capacity in an Ohio plant and added sizable casting operations to a new Michigan plant, the net effect of which has been almost to double our use of secondary aluminum. We expect to continue to obtain this aluminum from suppliers of secondary metal.

To summarize my remarks, a rapid growth has already taken place in the use of aluminum in our automotive products in recent years. I have pointed out a number of other areas where aluminum might be supplied to the products we will be producing in the years to come. While, of course, no one can accurately predict the future, we at Ford are optimistic as to the prospects of the continuation of this growth.

Thank you, Mr. Chairman.

Before concluding, Mr. Chairman, I would like to make this observation which I believe will help to place this molten-aluminum sit-

uation in proper perspective. In 1954 our demand for all aluminum products was approximately 56 million pounds per year. By 1959 we estimate that our demand for aluminum products will be about 127 million pounds per year, an increase of 71 million pounds per year during this brief 5-year period.

This compares with the 64 million pounds per year under the molten-metal contract with Reynolds. Furthermore, we believe that the trend toward greater use of aluminum parts will vary from outside suppliers large and small and will increase in future years. Thank you.

Mr. YATES. Thank you for a very fine statement, Mr. Ward.

Have plans been drawn, worked out, for the operation of the Ford plant at Listerhill? Do you know where its location will be with respect to the Reynolds Co.?

Mr. WARD. I cannot tell you the exact distance, Mr. Chairman, but it will be, I would presume, within a half a mile, three-quarters of a mile.

Mr. YATES. Will you receive the molten metal in the same manner that General Motors will receive it at Massena?

Mr. WARD. Yes; we will convey it in our own conveyances.

Mr. YATES. These are thermos trucks?

Mr. WARD. They are trucks with thermal properties, let us say.

Mr. YATES. I cannot envision one of these. Is this like a refrigerator truck except that it is for the reverse purpose?

Mr. WARD. It is an insulated truck, let me say somewhat of a vat. As we receive it, we put it on hoists and move it into our plants and dump it into holding furnaces, which is hot metal.

Mr. YATES. These trucks will receive the hot metal in some sort of a drop?

Mr. WARD. That I do not know.

Mr. YATES. There has to be some device which will load the trucks with hot metal.

Mr. WARD. That is right. Then we convey the metal to our plants, hoist it and put it into our holding furnaces from which we draw it to make our castings.

Mr. YATES. Is yours a 7-day operation in contemplation or 5 days?

Mr. WARD. Seven days. We anticipate taking hot metal 7 days and operating the plant 5 days.

Mr. YATES. How will you use the hot metal the other 2 days?

Mr. WARD. We will hold it in the holding furnaces.

Mr. YATES. Will you continue to buy pig, too?

Mr. WARD. We will buy pig in the event we cannot utilize the hot metal.

Mr. YATES. This contract as you stated is for 64 million pounds. When will this plant go into operation?

Mr. WARD. We are in operation at the moment on a small scale.

Mr. YATES. What portion of your 64 million pounds are you getting now?

Mr. WARD. I would say in 1958 we will perhaps get 15 to 18 million pounds.

Mr. YATES. What were the maximum and minimum figures in that contract? I don't remember.

Mr. WARD. Sixty-four million pounds, and then we have an opportunity to increase the contract tonnages in any 5 years by 15 percent.

We have an opportunity to reduce the tonnage by 10 percent, but if we reduce the tonnage below the 64 million pounds, it is necessary for us to add that to the end of the contractual term.

Mr. YATES. Your contract is different than General Motor's contract?

Mr. WARD. Yes; we have a fixed amount, and as I heard this morning, theirs is a maximum.

Mr. YATES. Where did you buy your pig before you entered the contract with Reynolds?

Mr. WARD. We used so very little; we had been using secondary metal, and we will continue to use secondary metal.

Mr. YATES. From whom did you buy your secondary metal?

Mr. WARD. A number of suppliers. We have a list here of about 15.

Mr. YATES. Did you buy them from the primary producers?

Mr. WARD. Yes, Alloy & Chemicals Manufacturing. I will give you the major ones first. That was one. Aluminum & Magnesium, Inc., Apex Smelting, Federated Metals, American Smelting & Refining, and then going down, Samuel Greenfield, Kaiser Industries.

Mr. YATES. Are any of the companies from whom you bought your secondary pig considered as small businesses?

Mr. WARD. Oh, yes; of the total of raw material suppliers, 10 were small, 7 were large.

Mr. YATES. When you say "small"?

Mr. WARD. Under 500.

Mr. YATES. Under 500 employees?

Mr. WARD. You, I presume, may want to take exception to the 500 again.

Mr. YATES. This has been Mr. Multer's crusade. I will let him ask you about that. From whom did you buy castings and bar and rod and other aluminum?

Mr. WARD. Bar and rod came from the same people.

Mr. YATES. From the same people?

Mr. WARD. Yes; we have very little use for——

Mr. YATES. What about castings?

Mr. WARD. Castings, we have a total here of 85 suppliers.

Mr. YATES. Will you continue to use those suppliers?

Mr. WARD. We certainly hope to.

Mr. YATES. But isn't one of the purposes of putting an operation of this type in to make more and more of your own castings?

Mr. WARD. Certainly we hope to make our castings to the extent of our contractual obligations for metal, but we certainly hope we are not going to affect our present suppliers. There may be some temporary dislocations, but we hope if there are, it would be very temporary.

Mr. YATES. Did you discuss with any of the other producers the possibility of their providing you with the same kind of facilities——

Mr. WARD. Yes; we did.

Mr. YATES. As Reynolds does?

Mr. WARD. We asked the three major producers. We also asked American Smelting & Refining and Apex Smelting Co.

Mr. YATES. What did you ask them for?

Mr. WARD. We—in negotiating for a contract for molten metal——

Mr. YATES. And Alcoa refused?

Mr. WARD. They declined, let me say.

Mr. YATES. What about the other companies?

Mr. WARD. They quoted.

Mr. YATES. Were their prices higher than Reynolds?

Mr. WARD. Obviously; or we would not be doing business with Reynolds.

Mr. YATES. It wasn't exactly obvious because I wondered whether they were in a position to furnish the quantities.

Mr. WARD. It is obvious to me, sir.

Mr. YATES. I see. You put a certain quantitative figure and you asked them for a price?

Mr. WARD. That is right.

Mr. YATES. Over a 10-year period, on the same terms that you have with Reynolds?

Mr. WARD. Yes.

Mr. YATES. You say you asked them for hot metal. Is that what I understood you to say?

Mr. WARD. Yes.

Mr. YATES. How could anybody furnish you with hot metal except at a location near their plant? Would you have built a plant near any of these other companies?

Mr. WARD. I think the other two were to supply secondary, which we would then have had to put into our melting furnaces, rather than holding furnaces for the hot metal that we presently receive.

Mr. YATES. You did not really ask for hot metal, then, in these negotiations?

Mr. WARD. We did, because we were aware of the operation that General Motors had and the Jones Mill operation, and then we were interested in a similar situation, and I believe, if I am not mistaken, that two factors would have entered into it. No. 1, the acceptance of hot metal, and No. 2, our remelting of metal to obtain hot metal to make the castings.

Mr. YATES. I am afraid I am not as familiar with this manufacturing process as I should be. I gather the impression—not gather the impression—there is a difference, obviously, between a holding furnace and a melting furnace. One of those or several of those people to whom you addressed your communication would have given you a product which would have compelled you to melt.

Mr. WARD. Yes.

Mr. YATES. Rather than to hold; is that correct?

Mr. WARD. Yes.

Mr. YATES. So that they would have furnished you this metal in the form of a pig or an ingot; would they not?

Mr. WARD. That is right; which would have necessitated much larger furnaces.

I would like to correct that, Mr. Chairman. I believe all were on the basis of molten metal.

Mr. YATES. All were on the basis of molten metal?

Mr. WARD. Yes. The last two, American Smelting & Refining and Apex Smelting on the basis of secondary metal, but melted by them. I am sure that is what it is.

Mr. YATES. Then furnaces would have had to be the same.

Mr. WARD. Holding furnaces.

Mr. YATES. They would have been holding furnaces rather than melting furnaces.

Mr. WARD. That is right.

Mr. YATES. That is interesting to me for this reason. Did the other companies say that they would be in a position to furnish molten metal to you?

Mr. WARD. Mr. Chairman, I was not in these negotiations and I understand now from counsel here that these two other secondary were not molten.

Mr. QUAIFE. I am Donald Quaife. I was not in the earlier portion of these negotiations either. All I know is that I was told that we solicited quotations on a hot-metal basis from the three major producers. It was my understanding that the two requests with respect to secondary metal producers were not on a hot-metal basis. I cannot be certain about that, but that is my understanding.

Mr. YATES. They were on a basis of ingot or pig?

Mr. QUAIFE. Pig or ingot; but I do not know the details of that situation.

Mr. YATES. Are the two comparable? Can you compare? They are two different articles, aren't they, when you talk about pig and ingot and the molten metal, in terms of price quotations?

Mr. WARD. Pig and molten? I think they are entirely different.

Mr. YATES. That is why I wondered why you would contact Apex and American Smelting and compare and offer to them on the same basis as you offer to the three primary producers.

Mr. WARD. I presume on the basis that they would supply to us a molten metal.

Mr. YATES. A molten secondary metal?

Mr. WARD. That is right.

Mr. YATES. And therefore not pig or ingot?

Mr. WARD. Therefore not what?

Mr. YATES. Pig or ingot, as counsel seems to indicate.

Mr. WARD. Therefore molten metal.

Mr. QUAIFE. We can get that.

Mr. YATES. Aren't you talking about two different things here?

Mr. MULTER. May I suggest, Mr. Chairman, that they do not have the information; they may be guessing; I think they ought to try to get the information.

Mr. QUAIFE. That is what I was going to suggest.

Mr. YATES. That is perfectly all right if you want to do that. I would like to find out whether or not the offer went to not only the primary-metal producers, the Big Three primary-metal producers and who else the offer did go to and what the results were. This is the first indication I have seen——

Mr. WARD. The result in what way?

Mr. YATES. The result of the negotiations in a sense. Apparently Reynolds gave you the best offer, as you indicated, and therefore you were in a position to give them the contract. I was under the impression that only Reynolds, or Alcoa possibly, or Kaiser could furnish molten metal in the quantities that you wanted. That is why I am interested that you bring these other names in.

Mr. WARD. Of course, any metal must be in molten form before you make your castings.

Mr. YATES. That is correct.

Mr. WARD. Whether we do it or someone else does.

Mr. YATES. Yes; but aren't you limited by the distances that you can carry molten metal?

Mr. WARD. Not if you have your melting furnaces on your property.

Mr. YATES. You and I are talking about the same thing, I think. You are still limited by distance, and that is the reason you put the furnaces on the property.

Mr. WARD. That is true.

Mr. YATES. How far can you transport molten metal?

Mr. WARD. I do not have that information.

Mr. YATES. Can somebody in your company tell us?

Mr. WARD. Oh, yes.

Mr. YATES. Could you supply that information for the record?

Mr. WARD. Oh, yes.

Mr. YATES. I'd like to know that figure, too, as to how far you can transport molten metal.

Mr. MULTER. Possibly this might clear it up: Is it within your contemplation that, no matter who would supply the molten metal, whether it would be primary or secondary, that you would erect a plant of your own near that plant where the hot metal was being produced?

Mr. WARD. Yes; that I would say. I would say so; yes.

Mr. MULTER. And I assume that you must have come to the conclusion that there was a saving in cost to your company in taking the molten metal as against taking the pig or the ingot and melting it down.

Mr. WARD. Yes.

Mr. YATES. I am told by counsel, who is a pretty good technician, that it is not a distance factor as much as it is a time factor. I see representatives from the aluminum companies sitting in the audience. Can they tell me how long they can keep metal molten?

Mr. WARD. About 2 hours, I would say.

Mr. YATES. Is it a time factor or a distance factor that is involved here? I see Mr. Wilmot there. What is it, Mr. Wilmot?

Mr. WILMOT. First of all, I would say that we have been struggling with this term. The technical term for this affair is a ladle. That is the vessel in which you transport this metal, and that is an insulated affair, and it could be electrically insulated so that the metal could remain molten for a considerable period of time. I couldn't say just how long.

Mr. MULTER. Would that be hours or days?

Mr. WILMOT. I would think hours. I wouldn't think it would be days.

Mr. YATES. If it is electrically heated, it would depend on how long you could supply it with electricity, wouldn't it?

Mr. WILMOT. Yes. I couldn't tell you.

Mr. HEINMAN. Of course, it would be a nice question whether you could take those on public highways.

Mr. WILMOT. I understand there they use it on trucks. They siphon the metal off from the smelting pots.

Mr. YATES. I think what we had better do is find some expert that could give us the benefit of his testimony on this. Do any of the companies have such a man?

Mr. WARD. Yes; we do.

Mr. YATES. Can you supply for the record the description of the properties of this molten metal and the complications of transporting it and how it would have to be done.

Mr. WARD. Perhaps I could read something to you.

Mr. YATES. Fine; the committee would like to know about it. It is an interesting process. I must confess that when these hearings began we had visions of your plant and General Motors' plant being right adjacent to the Reynolds plant, and either a sluice or a conveyor belt of some type bringing the molten metal in. The fact that this morning it appears that your plant and General Motors' plant are as much as a half mile away and that this metal is then being transported by truck brings a new factor into the picture, so that I must confess that I am not only amazed but entranced by this operation.

Mr. MULTER. Maybe they will eventually get around to dispensing with the truck and simply take this ladle with the heating element attached to it and just run it across on a rail from one plant to the other.

Mr. YATES. That is not in contemplation at the present time, is it?

Mr. WARD. Not to my knowledge.

Mr. YATES. I would like to have you read what you have.

Mr. WARD (reading):

Reynolds prepares alloys to our specification in carbon-lined iron pots generally used for production of aluminum. Molten alloy is siphoned from the pots at 1,700° to 1,800° F., skimmed and transferred to ladles for transport to the Ford plant. Ford provides specially equipped truck trailers which have the capacity to carry two 5,000-pound ladles of aluminum. The molten aluminum is produced 24 hours a day, 7 days a week, requiring Ford to staff its casting plant around the clock 365 days a year in order to transport and receive metal. Upon arrival at the casting plant, the molten metal is poured from the ladles into holding furnaces, where it is brought up to heat for alloying, if required, and then retained at pouring temperatures until needed for casting.

Mr. MULTER. That is a little different than the story we heard a moment ago from General Motors. They are going to take the hot metal only 5 days a week.

Mr. WARD. I heard that.

Mr. MULTER. What are they going to do the other 2 days of a week?

Mr. WARD. I do not know.

Mr. YATES. He said they were going to pour pig.

Mr. MULTER. Your casting plant will operate 7 days a week. You will take the hot metal 7 days a week?

Mr. WARD. We will take the hot metal for 7 days a week and operate 5, 6, or 7, depending on our requirements.

Mr. MULTER. But your plant, then, will be so equipped that when you take in the hot metal 5 days a week you will be able to keep the hot metal for a day or 2 days if necessary?

Mr. WARD. Yes; in our holding furnaces; that is right.

Mr. YATES. I get a different picture from what Mr. Cronin testified to, too, because I asked him whether this was in the nature of a tank car, and he said something like that. But what actually happens is you are using the actual ladles of the company, and just taking them out of their plant, transporting over to yours, pouring them, and taking them back; is that right?

Mr. WARD. I do not know whether they are our ladles.

Mr. YATES. They are ladles, anyway, that they are using to do this. I'd like to know whose ladles they are, incidentally. Where do you take possession of the metal?

Mr. WARD. We would take possession of the metal at their plant.

Mr. YATES. And for any accidents that occur en route the Ford Motor Co. would be liable?

Mr. WARD. Yes. It is not very far.

Mr. YATES. Mr. Multer suggests we are confused enough at the moment. Let's not get into any legal technicalities on liability. I would like to know whose ladles they are; whether you purchase them or whether Reynolds supplies them.

Mr. WARD. We will supply that information. I presume they are our ladles, because it so states here that they are to be poured into Ford ladles; so, they must be ours.

Mr. YATES. Mr. Multer.

Mr. MULTER. Mr. Ward, can you supply us with the same information I asked the other gentlemen for, which is a breakdown of your suppliers, in categories of 1 to 100 employees, 100 to 250, 250 to 500, and 500 and over?

Mr. WARD. Yes; we will obtain that information.

Mr. MULTER. For 1956 and 1957?

Mr. WARD. For what?

Mr. MULTER. For 1956 and 1957, and, also, the dollar aggregate with each classification.

Mr. WARD. We will see about gathering that information in going back into the record. We will break that down.

Mr. MULTER. And may I also assume that your suppliers are independent of the Ford Motor Co.? The Ford Motor Co. does not own any of those suppliers?

Mr. WARD. That is right.

Mr. MULTER. And has no proprietary or stock interest?

Mr. WARD. That is right.

(All material requested from Mr. Ward appears in appendix, pp. 439–441.)

Mr. MULTER. May we also know whether or not the Ford Co. has any proprietary or stock interest in any of the aluminum companies?

Mr. WARD. I am sure they do not, not to my knowledge.

Mr. MULTER. And I think you did say that as you expand your use of the aluminum, both the hot metal and otherwise, you do not contemplate that it will be necessary to dispense with the services of any of your present suppliers?

Mr. WARD. I would think they would have some temporary dislocations which we hope will be rectified in a comparatively short time.

Mr. MULTER. May I ask you for your comments about this business of the coincidental, the same price all the time for aluminum?

Mr. WARD. Obviously so-called identical prices are always disturbing. We have those difficulties not only with aluminum, we have it with copper, we have it with steel, we have it with practically any basic commodity, and it is not related solely to the aluminum industry.

Mr. MULTER. We were told yesterday we also have it in cigarettes, but I suggested then that some other committee ought to get into that. But we would certainly like to know what if anything you as the purchasing officer for Ford does about that situation. Have you made any protests to these companies?

Mr. WARD. Of course we protest whenever prices increase.

Mr. MULTER. What have you done about aluminum today. Everybody agrees the supply exceeds the demand. Unless, as I suggested yesterday, we have repeated the law of supply and demand, that means the price should come down. What if anything, do you say to your suppliers? "The supply is way over demand, why don't you cut my price?"

Mr. WARD. When supply exceeds demand, something gives, and the secondary market gave. The secondary market was considerably above the primary market.

Mr. MULTER. You are talking about the secondary aluminum market?

Mr. WARD. Yes.

Mr. MULTER. The tertiary or consuming market got no benefit out of it?

Mr. WARD. Pardon?

Mr. MULTER. The third market, the consumer market, got no benefit out of it?

Mr. WARD. If you could measure it. You know what the volume or availability of secondary aluminum is, perhaps around 600 million pounds.

Mr. MULTER. That price did give?

Mr. WARD. That did give.

Mr. MULTER. That dropped?

Mr. WARD. But it dropped——

Mr. MULTER. I noticed the other day, that the price of scrap has dropped, too.

Mr. WARD. Yes.

Mr. MULTER. I think they are beginning to cry that the bottom is dropping out of the market in scrap.

Mr. WARD. That is right.

Mr. MULTER. That means that there is that much more material available. Your secondary aluminum is just as good as your primary; isn't it?

Mr. WARD. We would very much like to see the price come down, but I cannot tell you how it should come down. That is up to the industry in establishing the prices.

Mr. MULTER. Do not think that I want to take your job from you, Mr. Ward, but I think if I was sitting in your place, I'd be raising the roof all around the town and with every one of the aluminum companies that I am dealing with: "Why won't you cut my price? You've got more than you need. It's coming out of your ears. Why don't you cut my price?"

Mr. WARD. Maybe it would be well if we did have you with us, if you were successful in such a venture.

Mr. MULTER. You wouldn't want me because then I'd go right along and say, "Why don't you pass that along to the purchaser of the automobile?" Instead of telling the purchaser the price is going up, as you have, not you alone but Chrysler and General Motors, too——

Mr. YATES. I haven't asked him that question yet.

Mr. MULTER. I'll defer to you. You ask him the question.

Mr. YATES. Do you see the possibility of the price of automobiles coming down in the near future?

Mr. WARD. Do I see the possibility? No; I do not.

Mr. YATES. Can you tell us why?

Mr. WARD. Yes. Increased labor costs and increased material costs. If we could get a relatively stable market with increased productivity, I am sure we could perhaps look forward at least to a stationary or maybe a reduced price.

Mr. MULTER. I had brickbats thrown at me when I sat back here and suggested standby price controls when Banking and Currency Committee was sitting here in this same room. You are not suggesting price controls?

Mr. WARD. Not a bit.

Mr. YATES. You are going to buy auminum at a cheaper price; are you not?

Mr. WARD. When?

Mr. YATES. Under this contract?

Mr. WARD. We are buying aluminum at what we consider a market price.

Mr. YATES. You are buying it at less than the published price?

Mr. WARD. A market was established for that particular type of aluminum.

Mr. YATES. You are buying it at less than the published price, are you not?

Mr. WARD. There is no published price of that aluminum.

Mr. YATES. For molten aluminum?

Mr. WARD. For molten.

Mr. YATES. You start with the published price and come to your conclusions.

Mr. WARD. That is right. That is the basis for the determination of the molten price.

Mr. YATES. Therefore, it is less than the published price, is it not?

Mr. WARD. Published price of pig?

Mr. YATES. That is right.

Mr. WARD. Yes; but it is not less than the published price of molten because there is no published price of molten.

Mr. YATES. In the absence of purchasing molten aluminum you would buy pig, would you not?

Mr. WARD. Yes; that is right.

Mr. YATES. And what would you pay for pig?

Mr. WARD. The market price.

Mr. YATES. What is the market price for pig?

Mr. WARD. Twenty-six cents.

Mr. YATES. That is the published price, too, isn't it?

Mr. WARD. That is right.

Mr. YATES. And this contract will provide you with aluminum at less than the published price, will it not?

Mr. WARD. At less than the published price of pig aluminum.

Mr. YATES. That is correct.

Mr. WARD. Right.

Mr. MULTER. About how much less?

Mr. WARD. Pardon?

Mr. MULTER. About how much less?

Mr. WARD. It is in the contract, I believe, less the freight factor, less a 10-percent factor.

Mr. MULTER. Can we arbitrarily say it would be at least 2 cents?

Mr. WARD. I would say somewhere in that area; yes.

Mr. MULTER. That is going to bring it down to 24 cents. You are going to save the cost of taking the pig and melting it down because it is already melted. You are going to save the cost of that one process. Have you any idea how much that costs?

Mr. WARD. I do not know how much saving is involved in that, Congressman Multer.

Mr. MULTER. There is a saving. You told us before you wouldn't have taken the hot metal except that there is a saving.

Mr. WARD. There is a difference I am sure in the investment required in melting furnaces versus holding furnaces. What that is, I do not know. I am not a manufacturing man, and what the differential would be, I do not know.

Mr. MULTER. Certainly whether it is going to be 24 cents or 20 cents or somewhere in between, it is going to be less than the 26 cents you are paying for pig?

Mr. WARD. However, at the present market price of secondary, we are paying about the same price.

Mr. MULTER. What is the secondary price?

Mr. WARD. That depends on the SAE, but let's assume something that might cost us 23½ cents, it might be 23.35 or 24, right in that range. In other words, the benefits that you are bringing up are not evident relative to the secondary and the molten prices today. There was a variation.

Mr. YATES. Two years ago there was a variance.

Mr. WARD. We have lost that advantage.

Mr. MULTER. Can you give us the percentage of increase of labor, costs of labor 1955 to 1956, 1956 to 1957?

Mr. WARD. In what, the automotive industry?

Mr. MULTER. Yes.

Mr. WARD. No, I cannot.

Mr. MULTER. Not in the industry, in your company.

Mr. WARD. No, I cannot.

Mr. MULTER. Could you get it for us?

Mr. WARD. I would have to consult with our people as to whether we should supply that information. We will consider it and report to you.

Mr. MULTER. Yes. I believe the other two companies agreed to give it to us on the basis of the percentage increase per hour.

Mr. WARD. I feel we would have no objection. We will consider it.

Mr. MULTER. Thank you.

Mr. YATES. Does Ford have melting furnaces now?

Mr. WARD. Yes.

Mr. YATES. If the price of scrap and secondary ingot comes down, then Ford can use that in addition to this contract, can it not, can use secondary ingot?

Mr. WARD. Oh, yes.

Mr. YATES. For its purposes?

Mr. WARD. Yes, we do. We do today.

Mr. YATES. You do today?

Mr. WARD. Yes.

Mr. YATES. And you contemplate that you will still use that?

Mr. WARD. Oh, yes. We will continue to use the secondary.

Mr. YATES. Even after this contract is in full operation?

Mr. WARD. That is right.

Mr. YATES. Obviously, you are going into the contract because you expect savings, are you not? You expect, according to your statistics, that you are going to make a major use of aluminum?

Mr. WARD. That is right.

Mr. YATES. In 1959, I think you said, you thought you would be using 127 million pounds.

Mr. WARD. That is right.

Mr. YATES. In contrast to the 56 million pounds that you used in 1954.

Mr. WARD. That is right.

Mr. YATES. So that you are going to use more and more aluminum——

Mr. WARD. That is correct.

Mr. YATES. In your automobiles.

Do you use aluminum in any other products than automobiles? Does Ford make anything else than automobiles?

Mr. WARD. Tractors.

Mr. YATES. Automotive equipment?

Mr. WARD. We use a small amount. I excepted tractors before. In automobiles and trucks, those were the figures that I quoted.

Mr. YATES. So that there will be a significant saving, you think, in the use of this type of a contract with Reynolds, a material saving?

Mr. WARD. We hope that it is a profitable venture, by the time we get through with our casting operations.

Mr. YATES. Would you accept another verb, such as "expect," rather than "hope"?

Mr. WARD. We expect, certainly.

Mr. YATES. In the absence of a contract of this type for molten metal, your prices for your aluminum would be higher ordinarily; would they not?

Mr. WARD. Would you repeat that, please?

Mr. YATES. In the absence of a contract such as this type, which furnishes you with molten metal at a price which, according to the formula that appears on page 11 of your contract, is about 2½ cents cheaper than the pig, you should be making substantial savings in materials?

Mr. WARD. That is true. But we would, if we had our own melting furnaces, we certainly would place them in Michigan or Ohio where they are close to our operations.

Now, we have a penalty from Alabama to our Michigan and Ohio operations of around a cent and a quarter a pound.

Mr. YATES. When you say "penalty," what does this mean?

Mr. WARD. I am talking freight now versus this 10 percent that you gentlemen brought up yesterday or today. While there is a differential for freight of approximately nine-tenths of a cent a pound, there is a penalty to us in comparison with pig delivery, let us say, in the Detroit area, which is 26 cents delivered. Nevertheless, we have a penalty of a cent and a quarter a pound to deliver the castings from Alabama to our using operations.

Mr. YATES. Your using operations in the North?

Mr. WARD. In Dearborn and in Ohio.

Mr. YATES. So that, are you saying your actual saving is not 2½ cents, but because of freight it is actually 1 cent?

Mr. WARD. No. We have the nine-tenths cent deduction from your calculated price, but then when we transport them, we must ship the castings from Alabama to Michigan and to Ohio.

Mr. YATES. Actually, then, instead of the 2½-cent saving, because of the freight deduction it is about 2 cents?

Mr. WARD. I would say 2 cents, somewhere in there.

Mr. YATES. Two cents a pound?

Mr. WARD. I do not know just what the saving is.

Mr. YATES. Two cents a pound on 127 million pounds might be significant.

Mr. WARD. It is not 127. The contract provides for 64 million.

Mr. YATES. With increases at your option.

Mr. WARD. That is right.

Mr. YATES. There are two other provisions in the contract which I would like to ask you a question about. One pertains to the certificate of necessity provision in paragraph 13, which says that Reynolds will make application for a certificate of necessity, but that in doing so, Reynolds agrees not to obligate itself to furnish any amount of aluminum from such plant to the United States Government or any person which may affect any of the obligations of Reynolds to Ford.

Does this mean that if there were defense commitments that the United States Government could not obtain any metal from that plant for defense needs?

Mr. QUAIFE. As I read the provision, and I must say that I am not too familiar with this particular provision, it simply says that it will not obligate or commit itself in such a way as to affect the obligations of Reynolds to Ford hereunder.

Now, Reynolds contemplated, and their testimony indicated, that they built a substantially larger plant than is necessary to supply us with the 64 million pounds, so that——

Mr. YATES. That is true, but I wonder about an emergency situation in which we found ourselves committed to the manufacture of defense needs.

Mr. QUAIFE. Of course, I think if there is an emergency, why this simply says that Reynolds will not obligate or commit itself in that respect.

Certainly, if we had a Korean-type emergency and the law was uniformly applicable, we would be subject to them as well as Reynolds.

Mr. YATES. Then you feel Reynolds would not be liable under a contract if the Government stepped in and took over a portion of the plant, even though it jeopardized your source of supply?

Mr. QUAIFE. Not if it were pursuant to an——

Mr. YATES. To a requirement of the Government?

Mr. QUAIFE. To laws.

Mr. YATES. Requirement of the Government.

Mr. QUAIFE. That is right; yes.

Mr. YATES. I refer your attention to paragraph 16——

Mr. QUAIFE. Would you mind indicating the section?

Mr. YATES. Paragraph 16 on page 21 of my copy. It follows that paragraph 13.

Mr. QUAIFE. We have it.

Mr. YATES. It is entitled "Aluminum Products and Fabricated Products."

Under that provision as I read it, Reynolds gets first opportunity to supply Ford with 30 percent of the aggregate dollar volume of its aluminum products; is that correct?

Mr. WARD. Reynolds has the opportunity to quote on 30 percent of the fabricated products.

Mr. YATES. And to meet any other price?

Mr. WARD. No, to quote.

Mr. YATES. Then what does this paragraph give it that it does not now have?

Mr. WARD. What does it give it?

Mr. YATES. What does this paragraph give to Reynolds that it does not now have if it now has the opportunity to quote to you? What does the 30-percent figure mean?

Mr. WARD. It now has an opportunity to quote us.

Mr. YATES. On anything?

Mr. WARD. Maybe we may not have given them the privilege of quoting on 30 percent, however. This is fabricated products; for example, a grille.

Mr. MULTER. I do not quite understand that. What privilege or right do they get by the privilege to quote? There is no obligation on your part to accept the quotation, is there?

Mr. WARD. If they are competitive, yes. If they are not competitive, no.

I might tell the committee that we gave Reynolds the opportunity of quoting on 68 percent of our fabricated products. We may have given them that privilege regardless of any contract.

Mr. YATES. Do you not give the same opportunity to quote——

Mr. WARD. We would give it to Alcoa or anyone else.

Mr. YATES. Yes. So you really did not give Reynolds anything in that respect, because as a purchasing agent you want the best price.

Mr. WARD. Other than that we have a 30-percent stipulation because it may be we would have given them an opportunity to quote on 15 percent.

Mr. YATES. But if Alcoa and Reynolds give you the same quotation, this paragraph says you shall take Reynolds' figure up to 30 percent of your requirements. Is that correct?

Mr. WARD. On a competitive basis; that is right.

Mr. YATES. Now, is this with respect to the entire Ford operation, the needs of your entire operation?

Mr. WARD. Yes.

Mr. YATES. For aluminum?

Mr. WARD. That is right.

Mr. YATES. There was some question in my mind whether it applied to a specific plant.

Mr. WARD. On fabricated parts, not castings. We have the basic aluminum products, but our purchase of that is nil, as I explained before.

Mr. YATES. I was confused by your answer, because the paragraph itself does not say "fabricated parts." It says aluminum, aluminum alloys, sheet, bars, rod coils, extrusion foil wire, cable, powder, paste.

Mr. WARD. That is right.

Mr. YATES. Mr. Riehlman, I am through.

Mr. RIEHLMAN. I just have this one question, Mr. Ward.

I think you know the genuine interest this committee has in the future welfare of small business. I think our chairman probably covered this question pretty well, but I would like to have a direct answer from you as to whether or not this new arrangement you have is going to eliminate some of your smaller suppliers of aluminum castings and so forth?

Mr. WARD. As I stated before, Congressman Riehlman, we do not believe so. There will be some temporary dislocations. It may affect only the larger suppliers and perhaps would affect the larger suppliers rather than the small, because the type of parts that we would be producing in our plant in Alabama would involve large items other than the pistons. In other words, transmission cases, for example.

Mr. RIEHLMAN. You do not feel that because of this new development and the procedure of getting the molten metal into your own plants and carrying on this expansive program of doing your own casting of many of your items in the Ford Manufacturing——

Mr. WARD. We expect it will not.

Mr. RIEHLMAN. I do not think I have any other questions.

Mr. YATES. Mr. Multer?

Mr. MULTER. Mr. Ward, in negotiating and closing the contract for the molten metal, were there any considerations or pressures brought to bear other than the interests of efficiency and economy?

Mr. WARD. In our going into what we might term an integration program?

Mr. MULTER. Yes.

Mr. WARD. With the growing demands we believe the die casting industry would stay at or near full capacity. Ford considered it expedient to provide facilities for projected use of aluminum castings on a greatly expanded basis, as we anticipated a large increase in our requirements and we were not sure that the suppliers would provide adequate facilities to meet increasing industry requirements.

The casting industry depended on the secondary market for at least 70 percent of their raw material, and we did not think the secondary market would support the increase in demand. If we purchased from a primary source, we would obtain an assured supply at a stable price without affecting the casting industry's supply or price.

Furthermore, when we integrated, obviously we expect to make a reasonable return on our investment.

Mr. MULTER. Tell me, what stability of price do you get when you agree to pay the published price, or use that as the base in a formula to fix price?

Mr. WARD. As I stated before, that price was established so far as we are concerned with prior contracts in existence.

Mr. MULTER. But I am addressing myself now to stability of price. Is there any stability of price when the price will fluctuate in accordance with published price? Surely you anticipate the published price will fluctuate, do you not?

Mr. WARD. The published price is the market price.

Mr. MULTER. That is right, and market price necessarily fluctuates up or down. It is not stable.

Mr. WARD. Consequently, so would the published price.

Mr. MULTER. That is right. I am trying to find out if your argreement calls for a fluctuating price, a market price.

Mr. WARD. That is right.

Mr. MULTER. How do you get stability of price? How do you stabilize the price?

Mr. WARD. That is taking us back to the question you were asking before, as to why are the prices 26 cents a pound, let us say, for pig aluminum across the board. I cannot answer beyond what I answered before.

Mr. YATES. I do not understand your answer in view of the provision of the contract on page 11, the pricing provisions of the contract. I refer your attention to subparagraph b, on page 11, and it says this:

> **The price of aluminum pig purchased by Ford hereunder shall be Reynolds standard list price and shipping and delivery terms and freight allowances prevailing at the time of each respective delivery of aluminum pig for the aluminum or aluminum alloy pig involved, provided, however, that such price shall not exceed the general prevailing market price of comparable aluminum pig.**

In the first part of that pricing section, there is reference, too, to market price as opposed to published price. Is there a distinction which should be drawn between market price and published price?

Mr. WARD. No. This is a 10-year contract, gentlemen, and we do not know whether there will be a differential between the published price and the market price before the contract expires. Today, there is no differential between the two, but it is possible that something like that could occur. I do not know that it will.

Mr. YATES. I have one further question. Has Ford ever bought pig below the published price from any of the primary companies?

Mr. WARD. No.

Mr. YATES. You pay the published price?

Mr. WARD. The only pig we have purchased was to charge our furnaces down in Alabama, and that was at the market price of pig.

Mr. MULTER. You see, when I talked about what prompted you to make this contract I was trying to find out if it was something other than efficiency and economy that prompted the molten-metal contract. You then read a statement, and one of the items that you referred to was the attempt to get a stable price.

I do not criticize you or anyone else for making a long-term contract and fixing your price at the market. But I want to know why you say you are looking for a stable price when all you are doing is looking for the market price, whether it be higher or lower.

Mr. WARD. If I may for just a moment, sir, take you back to the pricing of primary and secondary aluminum, I will go back to 1948. The price, if you want to use pig, we will use it, was 14.74. Secondary alloy was 21.36.

Mr. MULTER. You were glad to get the secondary because the primary was not available?

Mr. WARD. Pardon?

Mr. MULTER. You were glad to get the secondary at twice the price or 1½ times the price?

Mr. WARD. That is true. I am referring to the secondary market for the small user. In other words, if we entered into the secondary market, I say we, if all users entered the secondary market for these

tremendously increased requirements, and the secondary availability has not changed too much over the past 8 or 9 years, in other words there was an availability of—we will deal in pounds here—of 488 million pounds in 1950. There was 596 million in 1951, 610 million in 1952, 738 million in 1953, 584 million in 1954, 672 million in 1955. We anticipate 680 million in 1956 and we are estimating 700 million to 720 million in 1957. With the tremendous demands of diecasting, it is obvious that you would have an influence on the price of secondary metal by such tremendous demands thereon.

Mr. MULTER. Have you stabilized the price or has the industry stabilized the price of secondary metal?

Mr. WARD. I would say in view of the wide fluctuations between primary and secondary, that industry did not take advantage of the high price of the secondary market when they would have had the opportunity of increasing their prices let's say while the secondary market was many cents above the price of primary.

Mr. MULTER. If you had made a long-term contract then calling for market price you would be getting it cheaper today.

Mr. WARD. If we made a long-term contract when?

Mr. MULTER. At market price.

Mr. WARD. Market price?

Mr. MULTER. Yes, at market price.

Mr. WARD. That is market price primary?

Mr. MULTER. For secondary. When the secondary price was 21, if at that time you made a 10-year contract and called for the published or market price as you do in your present contracts for primary, you would be getting it cheaper today, wouldn't you?

Mr. WARD. I might say that when we made the contract it was somewhere around 29 to 30 cents in the secondary market, and as I explained before, we have lost about all that price differential between the primary and secondary—I call it primary—molten metal and the secondary market.

Mr. MULTER. What you have done, Mr. Ward, at least to my mind, is you have made very clear that there is no stable price in either primary or secondary.

Mr. WARD. I was referring to the obtaining of molten aluminum as having an effect, a stabilizing effect, more of a stabilizing effect, let me say, or, let me put it another way, creating such wide swings in the secondary market by virtue of our not drawing on the secondary market for such large quantities.

Mr. MULTER. It may have had that effect, but I still insist that you have not stabilized the price, nor do you have a stable price, and, no matter what the price may be, you are going to pay more or less in accordance with market, and, as I see it from the testimony adduced up to this time, nobody, neither customer nor competitor in the aluminum field, is doing anything about cutting price with supply in excess of demand; neither you nor the other customers who are in a similar position to Ford are going to these aluminum companies and saying, "This is the time when you ought to be cutting our price." No competitor in the field is cutting the price because, apparently, there is a coincidental arrangement, and I quote the word "arrangement." I am not saying there is an agreement; I have no right to say it, but the

coincidence is just too strong to be just accidental that the price is exactly the same. You do not have to comment if you do not want to.

Mr. WARD. No comment. I have nothing to comment on.

Mr. MULTER. Mr. Chairman, if we are through with Mr. Ward, and we have a few minutes, could we ask Mr. Wilmot to make some comment about this coincidence of price? I asked Mr. Rhoades, of Kaiser.

Mr. YATES. I want, first, to thank Mr. Ward for coming here and giving the committee the benefit of a very fine and thorough statement and testimony. We are grateful, Mr. Ward, and look forward to receiving the further information that we have requested. Thank you very much.

Mr. Wilmot, do you want to comment on Mr. Multer's question? He said he should have asked you this question yesterday. Would you like to answer it now?

FURTHER STATEMENT OF D. WILMOT, VICE PRESIDENT, ALUMINUM COMPANY OF AMERICA

Mr. WILMOT. I would be perfectly glad to, in this case. I simply say this. We make a very careful study——

Mr. YATES. Would you like to come forward so we can hear you, sir?

Mr. WILMOT. We make a continuing study of our costs, and, as those costs change, we make adjustments in our prices. We cannot, of course, have anything to do whatever with the prices which may be quoted by our competitors.

Mr. MULTER. Mr. Wilmot, don't you concede that there is necessarily a difference in cost of operation between Anaconda, Harvey, Alcoa, Kaiser, and Reynolds in the production of aluminum, whether it be hot or pig?

Mr. WILMOT. Oh, I presume there are some slight differences; yes. There is not any great mystery in the production of aluminum today. Facilities are very much alike. There will be some slight differences, I suppose, as Mr. Rhodes indicated yesterday, between a small plant such as they have at Tacoma and a very large plant such as they have in Chalmette, but the general practice is to average those out, so that you wouldn't have one price in Louisiana adjacent to Chalmette and a different price in Tacoma and still a different price somewhere else. It is not customary in any product of which I am aware. We don't have, for example, in selling sheet to the aircraft industry, we do not have one price out of Davenport sheet mill and a different price out of Alcoa and a third price out of Edgewater, for example. We couldn't live with that kind of a situation.

Mr. MULTER. Do you think there are any three airplane-manufacturing companies in this country that would bid on the identical specifications for manufacturing a plane, building a plane for the United States Government that would have the exact same price quoted when they submit their bids?

Mr. WILMOT. On an airplane?

Mr. MULTER. Yes.

Mr. WILMOT. Well, that is a highly complex device.

Mr. MULTER. But every last thing they are going to be asked to do will be precisely the same.

Mr. WILMOT. Depending upon the manufacturer's design and all that.

Mr. MULTER. I am assuming now everything along that line is settled. Here is a set of plans and specifications, and no one may vary one iota. They cannot cross a t or dot an i that is not already crossed and dotted in those plans and specifications, and the three biggest companies in the country bid on it. Do you think for one minute that the bids would be exactly the same?

Mr. WILMOT. No; I presume not, because there are literally thousands and thousands of parts in an airplane. This is a relatively simple process here. You are at the crudest stage in which aluminum is produced. It is the initial stage.

Mr. MULTER. Does the cost of the bauxite cost you the same as it does each of the other companies?

Mr. WILMOT. I cannot really say.

Mr. MULTER. Each of you has your own mines; do you not?

Mr. WILMOT. Oh, yes.

Mr. MULTER. In addition to that, I think you buy from other mines; do you not?

Mr. WILMOT. Well, no. As a matter of fact, we have our own mines.

Mr. MULTER. But how about the other companies? Do they have their own mines?

Mr. WILMOT. Yes, they do. They have about the same problems.

Mr. MULTER. Do any of the companies sell bauxite to one another?

Mr. WILMOT. Mr. Multer, I think you might find in plenty of records available in some of the lawsuits and so forth quite extensive records of the costs of the various companies in the production of aluminum. Those are all available and they have been published. There are apparently no secrets left in the aluminum business of which I am aware, it has been so thoroughly investigated.

Mr. MULTER. You mean whoever the witness was who did not want to give some cost material for fear—because it was a trade secret really should not have withheld the information?

Mr. WILMOT. That is his funeral, not ours. This subject, Mr. Multer, if I may say so, is an extremely complex one. I think you could go on with it for days. But, generally speaking, I would think this: That no one competitor in any field can gain more than a temporary advantage if he were to make a cut in price. May I cite the instance of gas station warfares. They break out every so often. There may be 4 stations on the 4 corners of an intersection. The first fellow comes out and announces a cut. He has an advantage just long enough for the other fellow, the other men on the other street corners to put up comparable signs. The result of all that, using my analogy or actual circumstance, I think, is merely that the price is cut, no more gasoline is sold, but for the temporary period the buyer benefits. Some of these people might go broke, but that is the occurrence.

Mr. MULTER. I am trying to stir up that kind of competition so maybe the consumer who buys the automobile would get some benefit.

Mr. WILMOT. I can assure you if any one of our competitors were to cut this 26 cents price to 25, 24, 15, 10, or whatever it is, we'd meet it, and instantaneously, so that there again you have undoubtedly a common price.

Mr. MULTER. I'm sure, Mr. Wilmot, if you sat in this seat, if we exchanged seats, you would agree with me that there is something strange about this coincidence of the exact same price.

Mr. YATES. Will you yield for a question?

Mr. MULTER. Yes.

Mr. YATES. May I ask you a question in line with your previous answer. You stated if Alcoa would cut the price by a cent——

Mr. WILMOT. No; I said if some other company would.

Mr. YATES. Alcoa would forthwith meet that cut. What if Alcoa were to raise its price by a cent?

Mr. WILMOT. I beg your pardon?

Mr. YATES. What if Alcoa were to raise its price by a cent or the other company were to raise its price by a cent, what would Alcoa do?

Mr. WILMOT. If Alcoa were to raise its price, the presumption of course would be that the others would get all the business so long as they had supplies available to meet the demand.

Mr. YATES. Then why do they come up to Alcoa's price?

Mr. WILMOT. I cannot answer that.

Mr. YATES. If the other company raises its price——

Mr. WILMOT. That is their determination, Mr. Yates, in a free-enterprise system.

Mr. YATES. Right.

Mr. WILMOT. You may either meet it or not meet it, as you elect.

Mr. YATES. Have all price increases been made with Alcoa as the leader?

Mr. WILMOT. No.

Mr. YATES. Well, if Kaiser moved its price up by 1 cent or as it has, as the price moved up, Alcoa would have gotten much more of the business if it had not increased its price, wouldn't it, and Kaiser would according to your statement have moved its price down again?

Mr. WILMOT. What makes you think Alcoa would have gotten a lot more business?

Mr. YATES. You just said that in response to a question by Mr. Multer, that if a price is lower than what the others are charging, all the business will come there until the others lower their prices.

Mr. WILMOT. But really, Mr. Yates, what do the others do?

Mr. YATES. If you were to increase your price or if the other person were——

Mr. WILMOT. Do they stand still and let us take all the business?

Mr. YATES. Either that or come down and meet your price again.

Mr. WILMOT. Yes.

Mr. YATES. The question that I ask is why do you necessarily have to move up to meet their price? I can understand why you would move down in order to meet competition, but I cannot see the competitive advantages of moving up to meet a price.

Mr. WILMOT. I can only say in answer to your inquiry, Mr. Yates, that we have to determine from our own costs the course of action which we are to take, and if we consider that the increases in cost or reductions in cost as the case may be will merit an adjustment in the price, then we proceed to make whatever price we consider to be fair and proper. And without regard to the others.

Mr. YATES. Isn't it strange that when a price goes up, the others do not try to get the business by maintaining the lower price?

Mr. WILMOT. I cannot answer for them. It depends entirely upon their policies and their costs.

Mr. MULTER. Is there anything this committee can do to induce Alcoa to cut their price?

Mr. WILMOT. Alcoa has done that over all the years, Mr. Multer, by virtue of the fact that they did not increase them. I mentioned to you here yesterday that had the price of aluminum followed the general trend of other metals and other materials, and we charted that, the price today would be about 52 cents a pound instead of 26 cents. I repeat we are extremely proud of the record we have made in pricing, and we believe implicitly that it has accounted for in very large measure the growth of the aluminum industry. We have not tried to get all the traffic would bear. I hope in your exposition here you are not urging that when the supply is less than demand, that we should raise the prices, if you think the reverse of that should be true. This is a one-way street; isn't it?

Mr. MULTER. All I can do is give you what I get from so many of my constituents: "You ain't done nothing for me lately."

Mr. WILMOT. We will see what we can do about those screen doors for you.

Mr. YATES. Thank you very much, Mr. Wilmot. I offer for the record if there is no objection a chart which appeared in the American Metal Market for November 9, 1957, showing automobile aluminum usage.

(The chart referred to is as follows:)

[From American Metal Market, November 9, 1957]

Automobile aluminum usage

Studies indicate that the average 1958 model American automobile will use 5.3 pounds more aluminum than in 1957. The following statistics were compiled by the automotive industry sales branch, Kaiser Aluminum & Chemical Corp.

Company and make	Average pounds per car		Percent increase (+) or decrease (−)
	1957	1958	
General Motors	32.0	41.6	30
Cadillac	60.6	70.4	16
Buick	48.7	57.5	18
Oldsmobile	42.5	54.7	29
Pontiac	36.2	43.8	21
Chevrolet	21.4	31.0	45
Ford Motor	35.7	39.6	11
Lincoln	75.9	87.6	15
Mercury	48.0	48.0	0
Edsel		48.0	
Ford	32.4	36.2	12
Chrysler Corp	65.2	63.3	−3
Imperial	126.5	119.0	−6
Chrysler	103.7	98.5	−5
De Soto	85.9	82.3	−4
Dodge	54.6	52.2	−4
Plymouth	52.4	52.0	−1
American Motors	48.8	48.8	0
Studebaker-Packard	22.6	22.6	0
Combined industry	39.6	44.9	13

Mr. YATES. The committee stands in recess until further notice.

(Whereupon, at 1 p. m., the committee adjourned until further notice.)

ALUMINUM INDUSTRY

TUESDAY, MARCH 11, 1958

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON MINERALS AND
RAW MATERIALS OF THE SELECT COMMITTEE
TO CONDUCT A STUDY AND INVESTIGATION
OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to notice, at 10:05 a. m., in the caucus room, Old House Office Building, Hon. Sidney R. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding), Sheehan, and Riehlman.

Also present: Bryan H. Jacques, staff director; Irving Maness, counsel; Bert Z. Goodwin, special assistant counsel; Katherine C. Blackburn, research analyst, and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The committee will come to order

Subcommittee No. 3 of the House Select Committee on Small Business is now reconvened for the purpose of continuing the hearings which began last November.

The committe will meet only until noon today because under the rules of the House we cannot sit while the House is in session and reading a bill under the 5 minute rule.

When we adjourn today we will reconvene at 10 o'clock tomorrow morning in room 1334, which is the regular meeting place of the House Committee on Interstate and Foreign Commerce.

I should state, too, that in view of the fact that the list of the witnesses has been distributed and the name of Harvey Aluminum Co. appears thereon—that the committee is in conference with Harvey Aluminum with reference to deciding on a date for it to testify at a future time.

The first witness today is the witness for Aluminium, Ltd. And I understand that its president, Mr. Nathanael V. Davis is here and ready to testify.

Mr. Davis, we will be pleased to hear from you at this time.

We are delighted to see you again. We remember with pleasure your statement in 1955 before this committee, Mr. Davis, when we were impressed with your testimony and we look forward to hearing you again.

99185—58——10

TESTIMONY OF NATHANAEL V. DAVIS, PRESIDENT, ALUMINIUM, LTD., ACCOMPANIED BY ERIC F. WEST

Mr. DAVIS. Thank you, Mr. Yates. I have with me this morning Mr. Eric West, who is president of our selling company in the United States.

Do you wish me to proceed with a statement?

Mr. YATES. Yes.

Is that the way you would like to go?

Mr. DAVIS. I think we would prefer to start off with a statement if that meets with your pleasure.

The subject of this subcommittee's current interest—the future of small business in the aluminum industry—is of vital importance to Aluminium, Ltd. Our degree of interest in this segment of the aluminum industry cannot be fully understood without an appreciation of the company's overall position.

At the risk of repetition, Aluminium Ltd., through its main subsidiary, the Aluminum Company of Canada, Ltd., is primarily a producer and seller of ingot products. This is in sharp contrast to most other producers both in this country and abroad who fabricate a large part of their own ingot production.

While we do conduct fabricating operations in certain areas of the world, our activities in the United States market are directed almost wholly toward the sale of ingot products. This market accounts for nearly 40 percent of our sales of Canadian primary aluminum.

In the role we play as an ingot supplier in the United States market, we sell not only to the independent or nonintegrated fabricators but also to some of the producers themselves. On a tonnage basis, approximately one-half of our sales are made to United States producers under long-term contracts signed some years ago.

While we hope that the producers, who are also fabricators on a large scale, will find it in their interest to continue purchases of ingot from us, our sales activities are concentrated on the sale of primary aluminum ingot products to the independent or nonintegrated fabricators of which the majority can be termed small business.

We regard this group as our natural long-range customers in this market.

Since we are a noncompetitive source of supply to the nonintegrated fabricators of ingot, there is, we believe, a community of interest between us. Our customers in this field form an important segment of the United States aluminum industry although they are far less in number than the thousands of manufacturers who make end and consumer products and who generally start not with ingot products but with sheet, foil, extrusions, rod, cable, and castings.

The position of the independent fabricators in the industry in recent years is indicated by the following table of mill shipments:

This table is, I believe, before you. It is taken from figures supplied by the Department of Commerce.

I might say while it is not in the statement that these figures exclude castings, forging, powder, and a few other products, but they do include the main products which start with primary aluminum ingot.

(The table referred to is as follows:)

Mill shipments of aluminum products by integrated producers and nonintegrated fabricators, 1950, 1956, and 1957

Commodity	1950	1956	1957
Sheet, plate and strip:			
(a) Integrated producers ..... short tons	491,456	603,980	594,139
(b) Nonintegrated fabricators ..... do	22,609	61,185	66,653
(c) Nonintegrated fabricators' share ..... percent	4	8	10
Foil:			
(a) Integrated producers ..... short tons	37,525	68,540	70,130
(b) Nonintegrated fabricators ..... do	14,007	24,867	22,732
(c) Nonintegrated fabricators' share ..... percent	27	27	25
Wire and covered cable:			
(a) Integrated producers ..... short tons	(1)	30,492	26,868
(b) Nonintegrated fabricators ..... do	(1)	29,710	22,797
(c) Nonintegrated fabricators' share ..... percent	(1)	49	46
A. C. S. R. and bare cable:			
(a) Integrated producers ..... short tons	50,183	56,120	55,184
(b) Nonintegrated fabricators ..... do	16,172	38,038	34,429
(c) Nonintegrated fabricators' share ..... percent	24	40	38
Extrusions and tubing:			
(a) Integrated producers ..... short tons	96,925	142,474	135,832
(b) Nonintegrated fabricators ..... do	51,369	217,905	212,041
(c) Nonintegrated fabricators' share ..... percent	35	60	61

[1] Not available.

Source: Department of Commerce, BDSA.

Now, a look at the table will show, I believe, that from 1950 to 1956, the independent fabricators increased their share of the total market in these products as well as registering notable gains in the volume of their shipments.

The table also indicates that in 1957 they held their position. This, however, is more apparent than real. During 1956, and particularly 1957, several of the independents were absorbed by primary producers, existing and potential. Moreover, 2 or 3 of the leading independents plan to be primary producers in the near future.

If the shipments of these two groups of independents were excluded from the table the independents' share of the total market would show a decline. Since, as a seller of ingot, we look to the independents as our natural long-range market, we are naturally concerned whether these developments represent a definite trend.

As to the future position of the independents as a group, it has perhaps best been commented on by the committee itself:

> In periods of shortage or abundant supply the position of the small independent fabricators is a difficult one. When there is no shortage of raw material the small fabricator must face increased emphasis by the primary producers on the sale of their own finished or semifinished products.

If there is a long-range remedy here, it would seem to lie in the direction of assuring the permanence and vitality of a noncompetitive source of supply of metal. This is a service we are willing and anxious to provide, supported quite naturally by our own self-interest.

The following figures bring up to date the record of our shipments to the independent fabricators: And there follows a table showing an increase from the very low year of 1947, shipments of about 98,000 tons.

1947	428	1953	124,500
1948	19,797	1954	118,300
1949	9,721	1955	113,554
1950	32,228	1956	107,508
1951	56,338	1957	97,740
1952	75,342		

As you can see, our shipments suffered slight decreases each year from the peak of 1953. Our inability to meet the increase in the requirements of the independents in 1955 and 1956 was due mainly to the production losses encountered by the Aluminum Company of Canada, Ltd., caused principally by abnormal water conditions.

Today, however, 20 percent of Alcan's—that is short for the Aluminum Company of Canada—installed smelting capacity, or approximately 150,000 tons, is idle for lack of demand.

Despite this situation, we are continuing to build for the future by enlarging our hydroelectric capacity and raw material facilities in a manner which will permit a rapid expansion of ingot capacity to provide for the future requirements of our customers.

The fact that we are continuing to spend large sums to provide the basis for future ingot expansion is perhaps the best evidence of our confidence in the long-range growth of aluminum consumption.

In addition to being eager sellers to the independents we provide a great deal of technical assistance to them. This takes a variety of forms mostly concerned with improvement of their production methods.

Many independents are working with relatively new equipment and process techniques and can benefit from the experience of longer established fabricators. We have considerable fabricating knowledge from operating large and small fabricating plants in such countries as Canada, England, and Switzerland. These provide a range of equipment and process techniques well suited to the needs of most independents in the United States.

Such technique has been made available to the independents by our sending experts to them and by receiving their experts in our own plants.

We have also undertaken in many cases to supply detailed engineering and technical support to customers' expansion programs.

The conventional fabricating equipment, particularly for sheet and rod rolling, is not always well adapted to small- or medium-scale production. To help solve this serious handicap to the expansion of small companies, we have made a special effort in recent years to evaluate and develop rolling equipment which can be bought for much less than the conventional equipment but which is capable of producing a substantial quantity and variety of wrought aluminum.

On the successful completion of this development work a small company engaged in making a finished product from aluminum sheet may thereby be able to afford to produce its own semifabricated product.

The independents who make finished products such as windows, moldings, utensils, and the like, have need of up-to-date information on forming, welding, surface finishing, and the like. Although this sort of technique is more generally available to the independent than that about casting, rolling, or extruding, we provide assistance along these lines, as do other sellers of ingot.

Many fabricators cannot maintain broad research programs. We operate research laboratories in Canada and elsewhere and the results of this research and the services of the research staffs are at the disposal of the independents.

The independent fabricators have become suppliers to the main aluminum consuming industries and we believe that they should be

able to participate in new developments, particularly in the building, electrical appliance, furniture, transportation, packaging, and irrigation industries. We are actively seeking solutions to the technical problems that prevent or limit the use of aluminum in these industries.

The aluminum industry has one of the most active advertising and promotional campaigns of any industry in the United States. Aluminium Limited's principal contribution in this respect during the last 4 years has been its cosponsorship of the well-known television program Omnibus. The company's commercials on Omnibus dramatize the use of aluminum and aluminum products and refer to the company's role as a specialist in supplying ingot to United States fabricators. In addition, we have a continuing advertising program in leading national magazines, newspapers, and trade periodicals in which we refer to the significant role played by the nonintegrated fabricators.

In conclusion, it may be helpful to describe our basic policy in this country which is closely related to the well-being of the independent fabricators.

In the United States where fabricators, both integrated and nonintegrated, have shown a remarkable ability to develop effectively the uses of aluminum we have followed the policy of limiting our activities to the sale of ingot products and encouraging the independent fabricator with technique, service, advertising, and product development.

This policy has contributed to the fact that Aluminium, Ltd., fabricates and manufactures a far smaller percentage of the metal it produces than any other privately owned aluminum company.

We have felt that the supplying of metal to the many medium size and small companies rather than to compete with them in semifinished and end products encourages the growth of small business, encourages innovation and competition, and adds to the vitality of the industry as a whole, while at the same time maintaining for the company loyal customers for metal.

From the foregoing I believe it is apparent that the validity and success of the policy we have been following will depend in large part upon the healthy and vigorous development of the nonintegrated fabricators whose future is of such importance to us.

Mr. YATES. Thank you, Mr. Davis, for a very fine statement.

I am sure the committee will agree with me that the facts that have been presented by you will be of great value to the committee in its activities.

I have a few questions and I am sure that the other members of the committee do, too.

I think, first, we would like to know how business is. How is Aluminium doing?

Mr. DAVIS. Business is quite soft.

Mr. YATES. Quite soft?

Mr. DAVIS. Quite soft.

Mr. YATES. I remember when you last appeared before our committee we were at the other end of the cycle, and at that time in response to Mr. Sheehan's questions you indicated that you would be hard put to take on new customers.

As a matter of fact, you would not be able to take on any new customers until 1958 or 1959; has that situation changed?

Mr. DAVIS. It certainly has changed.

Mr. YATES. You are looking for customers today?

Mr. DAVIS. We carry our order book in our pocket.

Mr. YATES. What is the capacity of Aluminium, Ltd., or I should say Alcan, should I not, technically?

Mr. DAVIS. Yes. The installed capacity of Alcan today is about 770,000 tons.

Mr. YATES. You told us in 1955 of an expansion program that Alcan was undertaking. Has it carried that program out or has it cut back on some of it?

Mr. DAVIS. In part it has been carried out. At the time we testified here before our capacity was, I believe, definitely lower than the figure I have just given you, but we have, during the past year, substantially cut back our expansion program in ingot capacity, and at the moment we are not enlarging our ingot capacity at all.

We are, however, continuing with other segments of the expansion program so that when the time comes we can increase ingot capacity very rapidly.

Mr. YATES. When you refer to other segments of the program what have you in mind?

Mr. DAVIS. The hydroelectric facilities and the raw material facilities are being expanded to provide a base for future expansion of ingot production.

Mr. YATES. Your statement indicates that half of your sales which are made in the United States are made to producers under long-term contracts.

Mr DAVIS. That is correct.

Mr. YATES. When you refer to producers, does that mean the Big Three?

Mr. DAVIS. Yes, that means the Big Three, but we also sell to Anaconda and we consider them a producer as well.

Mr. YATES. As I remember those contracts, under the testimony you gave in 1955, you had a maximum and minimum clause for delivery, did you not?

Mr. DAVIS. No, sir. I do not believe——

Mr. YATES. Am I confused with some other arrangement that you had in connection with the issuance of certificates?

Mr. DAVIS. I think you are thinking of the issuance of certificates, by which a customer, if he does not wish to take the metal, may pay half the price down and call for the metal at a later date by paying the balance of the price.

It gives the customer considerable flexibility in his financial commitments.

Mr. YATES. You do not have those contracts with the producers?

Mr. DAVIS. We are now offering the producers certificate facilities. We are planning to offer them certificate facilities in the years ahead for a portion of their contractual commitment under their contracts.

It becomes a little bit complicated because, for example, in the case of Anaconda, I believe I am correct in saying that we had a certificate contract with them before they were a producer.

Now they are a producer and do, as a result, have a certificate contract.

Mr. YATES. Do you sell to Reynolds as well as to Alcoa?

Mr. DAVIS. No, we do not. We do not sell to Reynolds.

Mr. YATES. Has there been any cutback on your contracts with the United States producers with whom you have them?

Mr. DAVIS. Yes. In December of 1957, we amended our contract with Alcoa.

Mr. YATES. Not with Kaiser?

Mr. DAVIS. Not with Kaiser.

Mr. YATES. You are making deliveries in accordance with those contracts to Kaiser?

Mr. DAVIS. Yes, we are.

Mr. YATES. Have you deferred any deliveries to any of the producers until some later time?

Mr. DAVIS. Under the amendment made with Alcoa in December of 1957, we have effectively deferred about 26,000 tons which would otherwise have been shipped in the last half of 1957, and the first half of 1958.

Mr. YATES. When you say "effectively deferred," you mean until some future time?

Mr. DAVIS. Until a later date.

Mr. YATES. Has that later date been established?

Mr. DAVIS. Yes, a large portion of that will go into the year 1962. It is tacked onto the end of the contract.

Mr. YATES. This does not hold with respect to Kaiser.

Mr. DAVIS. No; there has been no amendment in the Kaiser contract.

Mr. YATES. What do the contracts with Kaiser and Alcoa provide for deliveries, how much do they take per year?

Mr. DAVIS. The tonnage?

Mr. YATES. Yes.

Mr. DAVIS. Starting with 1958 or do you wish to go back over the record?

Mr. YATES. I would like to know—let's start with 1956, for example, and see what their deliveries were under the contracts for 1956, 1957, and 1958.

Mr. DAVIS. It may take a moment to get the precise figures.

Mr. YATES. Surely.

Mr. DAVIS. Mr. Chairman, the figures show that in 1956 under the Alcoa contract, 95,700 tons were shipped and billed; 1957, 70,000 tons; and under the contract as now amended, 1958 will call for shipments of 56,650 tons. 1959 will be 58,332 tons. 1960 will be 45,000 tons. 1961 will be 40,000 tons. And 1962, 26,430 tons.

Mr. YATES. How long did those contracts run prior to the amendments?

Mr. DAVIS. The contracts were signed originally in May of 1953 and were at that time expected to terminate in 1958, I believe.

Mr. YATES. And the amendments provided for extending the life of the contracts until 1962?

Mr. DAVIS. That is true. There have been several amendments over the period.

Mr. YATES. Are the amounts that have been shipped and are to be shipped the actual amounts called for by the contract?

Mr. DAVIS. Originally?

Mr. YATES. Yes.

Mr. DAVIS. It becomes quite complicated because there have been several amendments, but prior to the amendment of December 1957,

the total amount to be shipped will be shipped, but on a different schedule, and about 26,000 tons were, in effect, taken out of shipments from the last half of 1957 and the first half of 1958 and put in the schedule at later dates.

Mr. YATES. Do you have those amounts?

Mr. DAVIS. The figures——

Mr. YATES. The amounts that were delayed?

Mr. DAVIS. 26,403 tons, I think is the exact figure.

Mr. YATES. Annually?

Mr. DAVIS. Pardon?

Mr. YATES. Annually.

Mr. DAVIS. No, sir. That is the total figure for the period last half 1957, first half 1958.

Mr. YATES. This is the amount that was taken out and deferred, 26,000 tons?

Mr. DAVIS. That is correct.

Mr. YATES. For how many years—total for all of the remaining years of the contract?

Mr. DAVIS. No. That amount was taken out of the schedule for the last half of 1957 and the first half of 1958 and put into the schedule of deliveries in later years of the contract, so the total tonnage under the contract has not changed.

Mr. YATES. The total tonnage under the contract has not changed and 26,000 tons of the amounts to be delivered under the contract have been deferred for delivery for the years 1957 and 1958 until a later time. So that the only actual amount involved in the deferment then is 26,000 tons?

Mr. DAVIS. That is correct, and to be precise, Mr. Chairman, it would be from the last half of 1957 and the first half of 1958.

Mr. YATES. I run into a problem of tons and pounds again in this because I am trying to relate this to Alcoa's contracts with the Government under which it has tender rights and amendments were made to such contracts, as you know, the latter part of last year, and under which Alcoa said it would withhold tender rights.

I just wonder as to what is actually happening in view of the postponement of deliveries from your company; Alcoa is both having its cake and eating it, too, in a sense, by the fact that it still will adhere to its contractual obligations with Alcan as to the amount of certain imports and at the same time put to the Government 26,000 tons. You do not know anything about that?

Mr. DAVIS. We are not in a position to comment on that because we are not a party to the arrangements entered into between Alcoa and the Government, nor were we in any way consulted at the time they were entered into.

Mr. YATES. Were you consulted with respect to the reasons for the amendment by Alcoa? Why did you and Alcoa amend the contract in December?

Mr. DAVIS. The amendment was made as a result of a dispute between Alcoa and ourselves. Alcoa felt that we had not shipped all we should have shipped in earlier years and that they were therefore entitled to certain cancellations or deferment privileges during the current period. While we did not agree with them, we felt the best solution for us was to settle the matter under the best terms we could, and those were the terms upon which settlement was made.

Mr. YATES. Of deferring deliveries?

Mr. DAVIS. Yes, sir.

Mr. YATES. Did Kaiser ask you for an amendment to its contract?

Mr. DAVIS. No, sir, they did not.

Mr. YATES. What are the contract requirements of Kaiser under the contract?

Mr. DAVIS. Kaiser contract? I will have those in just a moment.

Mr. Chairman, under the Kaiser contract, 1956 shows 38,000 tons; 1957, 42,000 tons; 1958, 44,000 tons. The contract terminates at the end of 1958.

Mr. YATES. What prices do the contracts call for?

Mr. DAVIS. The market price in the United States.

Mr. YATES. The published price? You draw a distinction between published price and market price?

Mr. DAVIS. No, we do not.

Mr. YATES. If 26,000 tons has been deferred by Alcoa, the staff, with some rapid calculation, indicates that this amount in pounds is something like 52 million pounds, at a current market price of 26 cents—I think that is the current market price.

Mr. DAVIS. Yes, sir.

Mr. YATES. This would amount to $13,520,000 which might be involved in its dealings with the Government then in terms of its tender rights.

In view of the representations made by both Kaiser and Alcoa that they currently are in the same position as your company in having an oversupply of metal, why are these companies buying from you? Is it because of their contractual commitment?

Mr. DAVIS. It is because of their contractual commitments entered into several years ago.

Mr. YATES. And these are firm commitments?

Mr. DAVIS. Firm commitments.

Mr. YATES. There are no escape clauses in them?

Mr. DAVIS. No, sir.

Mr. YATES. The figures you have given the committee this morning are the actual contract requirements of the companies?

Mr. DAVIS. Yes; that is correct.

Mr. Chairman, Mr. West has drawn to my attention that during the summer of 1957 further deferment of 13,400 tons was made to Alcoa as a result of the strike that we suffered in our main plant in Arvida. Our main plant was closed down for a period of 4 months. We offered deferments to our customers in the United States.

Alcoa accepted a deferment of 13,400 tons. There, too, we deferred that figure into 1959, I believe.

Mr. YATES. You referred to published price a moment ago as being the same as market price. Is there a difference between the published price in Canada and the published price in the United States?

Mr. DAVIS. Yes; the price is different in Canada.

Mr. YATES. What is the price in Canada?

Mr. DAVIS. The price is 24.5 cents Canadian delivered.

Mr. YATES. Delivered. When you say Canadian delivered, what does this mean in terms of cost? Does that mean that a customer in Canada who buys aluminum from you will pay 24.5 cents, and this is his total cost, to have the product delivered to his place of fabrication?

Mr. DAVIS. That is correct, 24.5 cents Canadian.

Mr. YATES. You absorb the freight?

Mr. DAVIS. Yes, sir; we do.

Mr. YATES. You also sell aluminum in other countries, do you not?

Mr. DAVIS. Yes, sir; we do.

Mr. YATES. What is the price in Great Britain; is it the same as in Canada?

Mr. DAVIS. No, the price we offer aluminum in Britain currently is the equivalent of 24.63 cents per pound.

Mr. YATES. Is this delivered?

Mr. DAVIS. That is delivered at the customer's works. We have subsequently, we have recently put in a system whereby we allow certain discounts under certain circumstances to meet rather unusual competition in the United Kingdom.

Mr. YATES. Will you explain that further as to what you mean by "unusual competition" under unusual circumstances.

Mr. DAVIS. Our base price in the United Kingdom is the equivalent of 24.63 cents delivered at the customer's works. We have offered those customers who will rely on us for their supply of aluminum in a percentage that is traditional to their purchase pattern from us a 2 percent discount on their metal purchases.

We have done that; we instituted that procedure in an effort to meet competition from Russia.

Mr. YATES. Do you compete with any American companies in the United Kingdom?

Mr. DAVIS. American companies are offering metal in the United Kingdom.

Mr. YATES. At the same price as you are?

Mr. DAVIS. Not always at the same prices. There may be slight differences, and in some cases we do not know at what prices the metal is being offered.

Mr. YATES. The published price in the United Kingdom is 24.63 cents?

Mr. DAVIS. That is the price at which we sell and I believe the price at which others—other United Kindom producers, sell.

Mr. YATES. Is there such a thing as the published price in the United Kingdom as there is in this country, for example?

Mr. DAVIS. I am not sure, Mr. Yates, if it is actually published in the sense that it is published here. It is a price we have established and our British competitors do, we believe, sell at the same price.

Under current circumstances other people are offering metal at different prices in the United Kingdom market.

Mr. YATES. The reason I asked the question is I had assumed there was such a thing as a published price in the United Kingdom because there is the publication called the Metal Bulletin which is an English publication, and refers to current quotations for various metals, aluminum in England has certain prices, and I had assumed that this was the equivalent of our so-called purchase price.

They refer, the staff calls to my attention the fact that they refer to prices in the United Kingdom, 24.63 United States cents, and then the American metal market apparently has—which is the standard, I understand for the so-called American published price also has English metal prices on a daily basis.

So we assume that there was such a thing as a published price in other countries as well as in this country.

Mr. DAVIS. Well, I suppose it depends upon the definition of a published price.

It is published by the Metal Bulletin, as you say.

It is a price established by us or others who may be offering metal.

Mr. YATES. In your contracts with the producers and I assume with some of the independents here, you use as the basis for your price the published price, do you not, the so-called market price. I believe you stated the market price and published prices were the same thing.

Mr. DAVIS. That has been our policy over the years to sell in the United States at the United States market price.

Mr. YATES. Is that the same as published price?

Mr. DAVIS. I believe it is.

Mr. YATES. Do you make the same form of customers' contracts with your customers in the United Kingdom?

Mr. DAVIS. We have very few long-term contracts with customers in the United Kingdom. They buy on a hand-to-mouth basis.

Mr. YATES. Your contracts provide for the price to be at a fixed price or at the then prevailing market price?

Mr. DAVIS. At the then prevailing market price.

Mr. YATES. Is it the prevailing market price, the published price in any English periodical?

Mr. DAVIS. We sell at the price we are prepared to sell at, which may change from time to time.

Mr. YATES. I do not like to belabor the point but I just wonder what your customer would know the price to be if you entered into an arrangement with him for sale at the market price?

How would the market price be determined?

Mr. DAVIS. Well, our customers do not contract ahead with us in the United Kingdom.

Mr. YATES. You have no long-term contracts with any customer?

Mr. DAVIS. No, we have no long-term contracts in the United Kingdom. Customers come to us periodically and order metal from us, a thousand tons here, a thousand tons there. We tell them what our price is, it is public knowledge, and they buy at our price.

Mr. YATES. What is your price to the customer?

Is it at the time of your shipment to them or at the time of delivery?

Mr. DAVIS. Yes, it is at the time of our shipment to them.

Mr. YATES. You will tell them what the price is without reference to a published price?

Mr. DAVIS. That is correct.

Mr. YATES. The thought occurs to me then how does the American metal market or the English magazine to which I referred know what the current quotations are then?

Mr. DAVIS. We inform the public what our current prices are. For example, our price of 24.63 has been in effect in the United Kingdom for, I would think at least 9 months.

Mr. YATES. Under what basis do you give your discounts?

Mr. DAVIS. On the basis of, we call it actually a loyalty discount. If the customers are prepared to buy from us, say, 80 percent of their

requirements and that that has been traditionally what we have supplied to them we are prepared to give them a 2-percent discount at the year end. It is an unusual arrangement that we entered into for a very specific purpose, to meet competition that we had not previously met and competition that was very difficult to meet.

Mr. YATES. What is the basis for determining the loyalty of your customer, long-term contract or long-term dealing——

Mr. DAVIS. No; at the end of the year we would sit down with him, we know how much he has taken from us.

We know approximately what his requirements have been, if they have been in line with his traditional purchases from us we would offer him the rebate.

Mr. YATES. Does this—you stated this rebate is for the purpose of meeting Russian competition.

With whom else do you compete in the United Kingdom?

Mr. DAVIS. British Aluminum Co. is a seller in the United Kingdom and currently the American producers are offering in the United Kingdom——

Mr. YATES. All the American producers?

Mr. DAVIS. I believe all the American producers have offered in the United Kingdom. I may be wrong. I know certainly in two cases where offers have been made and sales are being made.

Mr. YATES. Which are the companies?

Mr. DAVIS. Reynolds is selling to its affiliated company in the United Kingdom, and we know of offers by Alcoa in the United Kingdom.

Mr. YATES. At what price?

Mr. DAVIS. We do not know the price at which Reynolds is selling to its affiliated company.

Mr. YATES. Do you know the price Alcoa sells?

Mr. DAVIS. They have approximated the prices at which we have been selling.

Sometimes they have been a little lower and sometimes a little higher.

Mr. YATES. Do you know the price at which Reynolds affiliate company is selling aluminum?

Mr. DAVIS. Reynolds affiliated company in England is a fabricator.

Mr. YATES. Is a fabricator?

Mr. DAVIS. Is a fabricator.

Mr. YATES. Is Reynolds not selling ingot?

Mr. DAVIS. Reynolds is, we understand, selling ingot to its affiliated fabricator in the United Kingdom.

Mr. YATES. Is this its only customer?

Mr. DAVIS. To the best of our knowledge it is.

Mr. YATES. Well, then, Reynolds really is not competing with your company, is it, in the sale of ingot?

Mr. DAVIS. We used to sell to that company. We lost the business.

Mr. YATES. Did Reynolds buy the company?

Mr. DAVIS. Yes, they bought a 50-percent interest in the company several months ago.

Mr. YATES. I do not remember your response to my question.

Is this the only customer that Reynolds sells, do you know?

Mr. DAVIS. To the best of my knowledge it is at the present time.

Mr. YATES. Does Alcoa compete with you in the sale of ingot and billet in the United Kingdom?

Mr. DAVIS. Yes, they have made several offers in the United Kingdom.

Mr. YATES. What are the offers that Alcoa has made?

Mr. DAVIS. I have a few here. We cannot keep track of all of the offers of our competitors but there have been a few offers. I would say 3 or 4 at least in the past 6 months.

Mr. YATES. What were those prices—what were the offers made?

Mr. DAVIS. I will see if I can find out from the notes.

I have in my records only two offers by Alcoa in the United Kingdom. One was for wire bars and one was for ingot.

I do not know the tonnages involved except in the case of the ingot offer in which our records indicate that about 300 tons were sold.

Mr. YATES. At what price?

Mr. DAVIS. Our records indicate that this offer was made at 24.25 cents, cost, insurance, and freight, United Kingdom port.

Mr. YATES. Cost, insurance, and freight, United Kingdom. Is that the same as delivered as you used the term?

Mr. DAVIS. It is delivered to port, cost, insurance, and freight, to the port but not to the customers' works.

Mr. YATES. To the port but not to the customers' works?

Your price was 24.63 delivered to the customers?

Mr. DAVIS. Customers' works.

Mr. YATES. And Alcoa's price was 24—what was that price?

Mr. DAVIS. 24.25.

Mr. YATES. Cost, insurance, and freight at port—and what was the date of that?

Mr. DAVIS. It was reported to us in November of 1957.

I do not know the precise date of the offer.

Mr. YATES. November 1957?

Is that the only instance that you know of Alcoa's offering metal in the United Kingdom?

Mr. DAVIS. Those are the only two I have a record of and I do not know of my own knowledge of any others in the United Kingdom.

Mr. YATES. If this is the extent of Alcoa's entry into that market you really do not have competition there, do you?

Mr. DAVIS. They have not sold a great deal in that market, no.

Mr. YATES. Do you sell your products in other countries than the United Kingdom and the United States?

Mr. DAVIS. Yes, we sell in many countries.

Mr. YATES. Can you tell us the countries in which you sell your products and the prices at which you sell them?

Mr. DAVIS. Rather than go into the price for each individual country which becomes rather complicated—I think perhaps it would be adequate to say that our base price throughout the world, outside Canada and the United States, is 24.63 cents.

For example, that would be our price in Germany, that would be our price in Holland and Belgium but in certain more distant parts of the world, for example, central Africa, our price would be higher as a result of the extensive freight involved but we would base our price originally on the 24.63-cent figure which we have established as our general base price for foreign sales.

Mr. YATES. Do you sell in France, too?

Mr. DAVIS. Occasionally we make sales in France but it is a very difficult market for us to penetrate because there is a high tariff.

Mr. YATES. What is the French tariff?

Mr. DAVIS. I do not have the figure in mind, but I do know it is significant.

Mr. YATES. Are there tariffs in other countries?

Mr. DAVIS. There is no tariff in the United Kingdom and in Germany which is a fairly important market for us, a certain tonnage is permitted to enter tariff-free annually.

There is, however, a basic tariff, but there are these tonnage-free entries.

Mr. YATES. What other countries do you sell in?

Mr. DAVIS. We sell in almost every country outside the Iron Curtain areas.

Mr. YATES. Do you, for example, sell—you sell in France?

Mr. DAVIS. Occasionally we make a sale in France.

Mr. YATES. You sell in West Germany, you stated. Do you sell in Italy?

Mr. DAVIS. Yes, occasionally we sell in Italy. Usually there are sales for reexport business.

Italy has a high tariff and our sales are generally limited to customers who reexport in fabricated form, therefore, they obtain a low price by buying from us.

Mr. YATES. Do you sell in Japan?

Mr. DAVIS. Yes, we sell occasionally in Japan when there is a shortage.

Mr. YATES. Is there a tariff there?

Mr. DAVIS. I think there is a small tariff in Japan.

Mr. YATES. Is your price in Japan the same base price of 24.63?

Mr. DAVIS. It would start off at 24.63. It might be a little higher because of the freight.

I think I can check that for you.

Mr. West confirms it is 24.63.

Mr. YATES. In Japan?

Mr. DAVIS. In Japan.

Mr. YATES. Delivered?

Mr. DAVIS. Delivered.

Mr. YATES. Is the price the same in Australia?

Do you sell in Australia?

Mr. DAVIS. Yes, we do sell in Australia.

Mr. Chairman, I only have an average figure for Australia in 1957. I think it would be fairly accurate to say that it is based on the 24.63 figure.

It may be slightly above as a result of the additional freight, but it would only be insignificantly above that figure.

Mr. YATES. Is the same base price applicable to other European countries such as Switzerland and Australia?

Mr. DAVIS. That is our base price for virtually all our sales, in fact, all our sales outside of Canada and the United States.

Mr. YATES. Delivered?

Mr. DAVIS. Delivered.

Mr. YATES. Do you find competition in any of the countries other than in England from any of the American companies in the sale of ingot?

Mr. DAVIS. Yes, we have run into several offers in other parts of the world.

Mr. YATES. Where?

Mr. DAVIS. We have run into offers in Japan.

Mr. YATES. From which companies?

Mr. DAVIS. I believe Alcoa and Kaiser.

We have run into offers in Brazil. We have run into competitive offers in India and in Spain. Those are countries I can think of.

Mr. YATES. In each of those countries you ran into competitive offers from Alcoa and from Kaiser?

Mr. DAVIS. I am not sure in each of those countries. I remember Alcoa and Kaiser did offer competitively on the Spanish market.

Mr. YATES. The price they offered was comparable to your price of 24.63?

Mr. DAVIS. I regret to say it was a little lower.

Mr. YATES. Lower. Where was it lower, in Spain?

Mr. DAVIS. On the Spanish offer.

Mr. YATES. Both Alcoa and Kaiser?

Mr. DAVIS. I think one was lower and one was approximately the same. I do not know.

Mr. YATES. Can you give us those prices and the dates?

Mr. DAVIS. According to our records we quoted on that business at a price of $562.17 per metric ton, and here I am not sure what this means, c. and f., cost and freight—Alcoa offered at $518.03. Kaiser offered at $563.05.

There were other offers as well. The Norwegians offered at still a lower price, and Formosa offered at still a lower price.

Mr. YATES. Can this be translated in terms of pounds? And American money, so that I can get a comparable picture in my mind?

Mr. DAVIS. Approximately, I would say, our quotation was about 25.6 cents, United States, per pound.

Mr. YATES. 25.6 delivered.

Mr. DAVIS. Cost delivered at Bilbao, which I presume is a port in Spain.

Mr. YATES. Yes.

Mr. DAVIS. And the Alcoa price appears to be approximately 23.6 cents.

The Kaiser price was $1 per metric ton above ours, virtually the same.

Mr. YATES. At what price do you sell in the United States?

Mr. DAVIS. We sell at 26 cents a pound delivered.

Mr. YATES. Why aren't we favored as the other countries are?

Mr. DAVIS. Mr. Chairman, we have to pay a tariff when we sell in this market.

Mr. YATES. You pay no tariffs anywhere?

Mr. DAVIS. Not in our main markets.

Mr. YATES. Well, in Spain do you pay a tariff?

Mr. DAVIS. I do not know whether in this particular case a tariff was paid or not.

I believe there was a quotation made to the Spanish Government.

Mr. YATES. Would you say that in countries in which you offer your product at a price of 24.63 delivered that there was no tariff in any of those countries?

Mr. DAVIS. In many countries there are tariffs, Mr. Chairman. That is correct. But in our main markets, such as England and Germany, we sell there without jumping a tariff barrier.

Mr. YATES. Why is the United States different from those countries?

Mr. DAVIS. The United States has a tariff.

Mr. SHEEHAN. The Congress passed the tariff laws.

Mr. DAVIS. I beg your pardon?

Mr. SHEEHAN. The Congress passed the tariff laws.

Mr. YATES. That is true. I am trying to find out whether the United States, because of its tariff, is in a class by itself insofar as the price is concerned.

Mr. DAVIS. No; I would not say it was entirely the tariff, Mr. Chairman.

The tariff bears upon the net return we receive on our sales of Canadian metal in the United States, because we have to pay the tariff ourselves.

But our policy, basically, has been over the past years to sell in this market at the prices prevailing in this market.

And we have felt, rightly or wrongly, that to do otherwise would involve us in the risk of retaliatory tariff action.

Mr. RIEHLMAN. I just want to ask this question, Mr. Chairman: In figuring the cost factor, is not the cost greater for you to export aluminum to foreign countries than it is to ship it into the United States? Are not your transportation and shipping costs greater?

Mr. DAVIS. It would depend upon the country concerned. I would think our costs of shipping from our eastern Canada plants to the United Kingdom would not be much greater than our costs of shipping from that same plant to a customer, for example, in the middle or central part of the United States.

Mr. RIEHLMAN. What about the rest of the European countries?

Mr. DAVIS. Freights to Belgium, Holland, Germany, would be relatively low, too, and I would put them in the same category as the United Kingdom and virtually the same as shipping our average freight to the United States. I do not have those figures at my finger tips, but it is quite true, when we sell in Australia, for example, or in central Africa, of course, the freight is considerably higher.

Mr. RIEHLMAN. Well, I believe that your previous testimony was, too, that you might adjust the price in those other countries.

Mr. DAVIS. Yes, in certain areas we do.

Mr. RIEHLMAN. But there is no differential in the price in the United States as far as any industry within the continental boundaries is concerned?

Mr. DAVIS. No, sir, none at all.

We must, of course, look at this through our eyes and judge it upon what we receive after paying the costs of transporting, duty, and selling it.

Mr. YATES. Are there such things as loyalty discounts given in the United States?

Mr. DAVIS. Excuse me, Mr. Chairman.

Mr. YATES. I beg your pardon. Did you want to say anything else?

Mr. DAVIS. Mr. West points out that our base price of 24.63 in the world markets does not include any tariff. If we run into a tariff, we would be inclined to add that to the price.

Mr. YATES. When you say inclined to add it, I can understand that you would be inclined to add it, but does it mean that you add it?

Mr. DAVIS. Normally, we would. There may be instances where we would offer a sealed bid and we might have a different price.

Mr. YATES. Well, in some instances, you do not add it, is this true?

Mr. DAVIS. I do not know of any instances at the moment, Mr. Chairman.

Mr. YATES. You do not know of any. Does it mean that you do not add it? When you say you do not know of any, are there instances where you think you might add it?

Mr. DAVIS. I think there may well have been.

Mr. YATES. Or you do not add it?

Mr. DAVIS. There may well have been.

Mr. RIEHLMAN. Could I pursue it further. Take a specific country like France to which you referred. They have a high tariff. Do you add the tariff to the price of your aluminum there?

Mr. DAVIS. If we were to make a sale in France, we would.

Mr. RIEHLMAN. Did I understand you to say you had made sales in France?

Mr. DAVIS. Yes. I am trying to reach back into my memory. I think some of our sales there have been made under arrangements which permitted the metal to enter duty free. That is my impression. In other words, I believe many of these countries, when they face a situation where their domestic industry is inadequate to meet total demand within the country, they will, on a spot basis, so to speak, permit the importation of small tonnages of metal duty free to meet that immediate situation.

Mr. RIEHLMAN. I believe on the chart we had before us there was a price listed for delivery in France of 22.9 per pound. That was March 1, 1958.

Mr. DAVIS. 22.9.

Mr. RIEHLMAN. Yes.

Mr. DAVIS. That may be the domestic price in France. There has been a recent change in the domestic price in France.

Mr. RIEHLMAN. But you have told us that your world price is based on 24.63.

Mr. DAVIS. Yes, sir.

Mr. YATES. Obviously, you do not sell in France, do you?

Mr. DAVIS. Only occasionally.

Mr. YATES. Because you do not meet the price of 22.9 cents, do you?

Mr. DAVIS. We could not meet the price after absorbing the duty. And Mr. Covel has brought to my attention the fact that the French duty is 20 percent ad valorem.

Mr. RIEHLMAN. I wonder if you could recall the price for which you sold in France? You sold small quantities?

Mr. DAVIS. I think it was the price at which we were selling elsewhere. What it was at that time, I am not sure.

Mr. RIEHLMAN. You have not sold recently?

Mr. DAVIS. No, sir; not to my knowledge. The French market is usually closed to us. If we sell something there, we consider ourselves lucky.

Mr. YATES. This is exclusively the market of French producers?

Mr. DAVIS. That is correct.

Mr. YATES. Are there such things as loyalty discounts given in the United States?

Mr. DAVIS. No, sir. Mr. Chairman, I would like to explain. That is an unusual arrangement which we entered into but we were meeting a very unusual situation. We were meeting competition from Russia. Russia was selling at a price which they guaranteed would always remain at a discount below ours.

Mr. YATES. Was the price with the loyalty discount below the Russian price?

Mr. DAVIS. No, sir.

Mr. YATES. In other words, you just met the Russian price?

Mr. DAVIS. No, sir; we did not even go down to meet the Russian price.

Mr. YATES. Well, did your customer buy it from the Russians?

Mr. DAVIS. Some did.

Mr. YATES. Under what circumstances did you give your loyalty discounts? According to your statement now, you did not even have to give your loyalty discount because they bought from the Russians.

Mr. DAVIS. We have our loyalty discounts and are giving them to those customers who have bought and traditionally buy from us.

Mr. YATES. Is the price with the loyalty discount below the Russian price?

Mr. DAVIS. No, sir; it is above the Russian price.

Mr. YATES. In other words, they deal with you because they did not wish to deal with Russia?

Mr. DAVIS. That is correct.

Mr. YATES. Even though your price is higher?

Mr. DAVIS. Our price is higher than the Russian price.

Mr. YATES. What would the price with a discount be?

Mr. DAVIS. The discount would amount to half a cent a pound.

Mr. YATES. So that if it is 24.63 delivered, it would be what?

Mr. DAVIS. 24.1, approximately.

Mr. YATES. 24.1. Is this the lowest price you were offering your product for?

Mr. DAVIS. Yes, sir.

Mr. YATES. And you still make a profit on that price?

Mr. DAVIS. Yes, sir; we can.

Mr. YATES. Alcoa has cut back a third of its capacity—not Alcoa. Alcan has cut back a third of its capacity, has it not?

Mr. DAVIS. We have cut back about 20 percent of our installed capacity, Mr. Chairman.

Mr. YATES. Where did I get the figure of 30—you have a third of your capacity idle?

Mr. DAVIS. No, sir. We have 20 percent of our installed capacity idle. It would be, the percentage would be smaller when related to our actual capacity, practical capacity at this particular time.

Mr. YATES. I think the way we got the figure was because you indicated you had 300 million pounds of capacity idle of your total capacity of 1.5 billion. Are these figures wrong? I thought that was in your statement.

Mr. DAVIS. Our installed capacity is 770,000 tons, which is about 1.5 billion.

Mr. YATES. That is the figure I used, and you said 300 million pounds of capacity are idle, which is roughly a third. I would like to know whether our figures or your figures are wrong, 20 percent or 30 percent.

Mr. DAVIS. A fifth.

Mr. YATES. Our figures are wrong. It is a fifth.

Let me ask you this question: Your capacity is idle because of a lack of market at the moment, is that true?

Mr. DAVIS. That is correct.

Mr. YATES. Why is it not better for you to have a lower price rather than reduce capacity, rather than make capacity idle?

Mr. DAVIS. We have reduced our prices in certain markets during the past several months. We have not made large reductions but we have reduced them somewhat.

Mr. YATES. Which markets have you reduced the price in?

Mr. DAVIS. The United Kingdom by the introduction of this discount, and the 24.63 price is lower than it was 6 months ago.

Mr. YATES. Is the United Kingdom your largest customer?

Mr. DAVIS. No. The United States is our largest customer.

Mr. YATES. Would not the United States become even a larger customer if you lowered your price?

Mr. DAVIS. Mr. Chairman, if you could assure me the tariff would not go up, I could answer that question. [Laughter.]

Mr. YATES. Well, as one who has been in Congress for 10 years and seen how slowly tariffs change, I would think that probably you would find that you would at least have a significant amount of sales before the tariffs were changed, if the tariffs were changed, and I do not know that they would be.

Mr. DAVIS. Mr. Chairman, I do not wish to argue with you. They may be slow to change, but they would be slow to change both ways.

Mr. YATES. When was this tariff placed in effect?

Mr. DAVIS. There have been recent reductions under the GATT treaties and the current tariff is 1.3 cents. I believe the tariff on the books as passed by Congress is 4 cents a pound. Am I right, Mr. West?

Mr. YATES. When you were last before us in 1955, you indicated the tariff was 1½ cents.

Mr. DAVIS. Yes, sir; it has come down from that figure as a result of the negotiations through GATT.

Mr. YATES. Has your price been lowered as a result of a lower tariff?

Mr. DAVIS. No, sir; it has not.

Mr. YATES. Should it not be? I mean, if your price is measured in terms of the tariff, should not you then raise or lower it as the tariff goes up or down?

Mr. DAVIS. I may have misled you, Mr. Chairman. Our price is not measured in terms of the tariff. The tariff very definitely influences our consideration of price action.

Mr. YATES. As I remember—I must confess I am a little confused by this last series of questions and answers. I think I recall, in response to Mr. Sheehan's questions, in 1955 you indicated that your price in Canada and your price in this country was different, almost I think to the exact fraction of a percent I think based on the tariff.

Mr. DAVIS. I believe——

Mr. YATES. I think Mr. Sheehan was satisfied with your answers because of that. Now, it appears that there is not the same relationship, an exact relationship between the tariff and the price. Is your price 1.3 cents higher in the United States than it is in Canada?

Mr. DAVIS. No, sir; it is not that. I can give you the figure. Expressed in terms of United States dollars, the Canadian price of necessity fluctuates. Our price in Canada is currently the equivalent of 25.4 cents, United States cents.

Mr. YATES. 25.4 United States cents?

Mr. DAVIS. Yes.

Mr. YATES. And we add 103 to that, we come out with——

Mr. DAVIS. 1.3.

Mr. YATES. 1.3, and we come out with 26.34; is that right?

Mr. DAVIS. 26.7.

Mr. RIEHLMAN. 0.7.

Mr. YATES. 24.4. You come out with 24.7?

Mr. DAVIS. We sell at 26 cents.

We sell at the American price in this market.

Mr. YATES. So there is no exact relationship?

Mr. DAVIS. No; perhaps this would help, traditionally our price in Canada has been lower than our price in the United States. At the time of the previous hearings—I believe that the spread between the 2 prices was about an equivalent of the duty.

Today, it is not quite the same.

Mr. YATES. Why do you sell at a higher price in Canada today than in England?

Mr. DAVIS. We attempt to establish a price that we consider reasonable in the light of all considerations, and I would say as a general statement, Mr. Chairman, that in order to sell and have aluminum compete effectively in the United Kingdom and many European markets aluminum must sell at a price somewhat lower than the prices prevailing in North America. I have not been able to document that with specific prices of competitive materials, but I believe that is true as a general statement.

If aluminum is to compete effectively in Europe it should sell at a lower price than that at which it sells in this market.

I am thinking of competition in terms of steel, and copper, and so forth.

Mr. YATES. Is there a tariff in Canada which is imposed on exports by American producers?

Mr. DAVIS. Yes, sir; there is.

Mr. YATES. The same amount?

Mr. DAVIS. I think it is either 1.3, or 1¼ cents.

It is approximately the same.

Mr. YATES. Do American producers sell in Canada?

Mr. DAVIS. I believe there have been instances when Reynolds has sold to its affiliated companies.

Mr. YATES. Only to its affiliated companies?

Mr. DAVIS. To the best of my knowledge.

Mr. YATES. Does Alcoa sell?

Mr. DAVIS. We have not seen Alcoa make any offers in the Canadian market.

Mr. YATES. Does Kaiser sell in the Canadian market?

Mr. DAVIS. Not to my knowledge.

Mr. YATES. Is there any agreement between the companies that they shall not sell?

Mr. DAVIS. None whatsoever.

Mr. Chairman, I assume that you are referring to ingot and ingot production because I believe Alcoa, Kaiser, and perhaps many others and many of the fabricators do sell in Canada.

Mr. YATES. I am talking about the ingots.

I do not recall your reply to my question, why don't you sell at a lower price in order to stimulate sales in the United States. You are afraid of the tariff?

Mr. DAVIS. Mr. Chairman, I think we said at the earlier hearings and have said many times before, we have felt, at least to date, that if we were to reduce our prices in the United States below the prevailing prices of the United States producers, we would run the risk of retaliatory action, on tariffs.

Mr. YATES. Do you think that is the only reason?

Mr. DAVIS. I would not like to say it is the only reason because several things come into consideration in establishing the price at any one time.

But that is a very important consideration for us,

Mr. YATES. Has there been a time when your price deviated from that of the United States producers?

Mr. DAVIS. I believe at one—in one instance, we made a change in our price—it was a change in the upward direction. That is the only instance that I remember.

Mr. YATES. Did the American producers follow?

Mr. DAVIS. They did.

Mr. YATES. So for how long were you alone in your upward trend?

Mr. DAVIS. I would imagine a few minutes. [Laughter.]

Mr. YATES. Supposing you lowered it, how long would it take for them——

Mr. DAVIS. A few minutes——

Mr. YATES. (continuing). For them to lower it?

Mr. DAVIS. A few minutes. That is merely a matter of opinion, of course.

Mr. YATES. Where would be the retaliation—where would it occur?

Mr. DAVIS. We fear that there would be sufficient sentiment in the United States from foreign competition, which we would be classified as—to possibly result in an increase in the tariff. And I think, Mr. Chairman, if you view what appears to be happening with the sale of lead and zinc and copper coming from Canada today, if you were in our position, you would proceed very cautiously under those circumstances.

Mr. YATES. But this is a direct answer, in the event you lowered the price by a cent they would follow, too—how are they hurt in the same manner as the lead producers or zinc producers?

Mr. DAVIS. Foreign competition is presumably hurting them. The United States producers, at least, one to my knowledge, are not producing to capacity at this time.

Mr. YATES. I am a little puzzled by your expression because in the case of the United States versus Aluminum Co. of America, which is 153 Federal Supplement, which is cited there, the date of the de-

cision is June 28, 1957, on page 185 of the volume 153 of the Federal Supplement, you have the mill cost, of Alcoa, Reynolds, and Kaiser, for the years 1947 through 1956, inclusive, each of those years the total mill cost varied from a low in 1947 by Alcoa, of 9.40, and to a high on the part of Kaiser in 1956 of 14.28 cents.

Of course, there are other costs which should be added to mill costs.

Will you tell us what those additional costs are that go into the final price over and above mill costs?

(The table referred to is as follows:)

UNITED STATES *v.* ALUMINUM COMPANY OF AMERICA (CITE AS 153 F. SUPP. 132), FURTHER EXTENDED

TABLE VII.—*Mill costs (cents per pound of pig)*

Year	Company	Raw material cost	Power cost	Manufacturing costs	Total mill costs
1947	Alcoa	3.71	1.73	3.96	9.40
	Reynolds	3.03	2.17	4.29	9.49
	Kaiser	4.93	1.90	3.55	10.38
1948	Alcoa	3.87	1.79	4.55	10.21
	Reynolds	3.34	2.60	4.72	10.66
	Kaiser	4.97	1.93	4.27	11.17
1949	Alcoa	4.14	1.94	4.86	10.94
	Reynolds	3.56	2.28	5.60	11.44
	Kaiser	5.14	1.81	4.58	11.53
1950	Alcoa	4.21	2.05	5.12	11.38
	Reynolds	3.18	2.27	4.48	9.93
	Kaiser	5.21	1.80	4.35	11.36
1951	Alcoa	4.02	2.70	5.57	12.29
	Reynolds	3.70	2.60	4.84	11.14
	Kaiser	5.36	1.85	5.09	12.30
1952	Alcoa	4.65	2.73	6.34	13.72
	Reynolds	4.31	2.70	5.31	12.32
	Kaiser	5.86	2.11	7.22	15.19
1953	Alcoa	4.71	2.93	6.43	14.07
	Reynolds	4.63	3.16	5.42	13.21
	Kaiser	6.15	2.21	8.47	16.83
1954	Alcoa	4.42	2.82	6.40	13.64
	Reynolds	4.85	3.10	4.89	12.84
	Kaiser	5.36	1.91	7.45	14.72
1955	Alcoa	4.44	2.93	6.06	13.43
	Reynolds	4.50	3.07	5.71	13.28
	Kaiser	4.85	1.88	7.13	13.86
1949 (9 months)	Alcoa	4.00	1.78	4.73	10.51
	Reynolds	3.71	2.32	5.01	11.04
	Kaiser	5.18	1.81	4.64	11.63
1955 (9 months)	Alcoa	4.45	2.76	6.04	13.25
	Reynolds	4.78	3.12	5.28	13.18
	Kaiser	[1] 4.84	1.88	[1] 7.11	[1] 13.83
1956 (9 months)	Alcoa	4.60	3.06	6.16	13.82
	Reynolds	4.56	3.05	6.02	13.63
	Kaiser	5.08	1.85	7.35	14.28

[1] Corrected figure.

Mr. DAVIS. All overhead, interest. Of course transportation, selling expenses, duties where applicable.

Mr. YATES. But interest for what?

Mr. DAVIS. On borrowed money. I doubt if it would appear as a mill cost, however.

Mr. YATES. Overhead, of what type, in connection with your administrative expenses?

Mr. DAVIS. Administrative expenses.

Selling expenses.

Mr. YATES. Are your mill costs roughly in the same class as those which I have indicated, highest mill cost there through 1956 was 14.20 cents—is yours about that?

Mr. DAVIS. Mr. Chairman, we prefer not to disclose our mill cost. We feel that based on our own estimates of what or competitors costs are that currently our costs are approximately the same as theirs, currently I mean.

We feel that over the long pull, when we can utilize our hydroelectric facilities to better advantage we will tend to have a slight cost advantage over the American producer.

Mr. YATES. You do not at the present time?

Mr. DAVIS. I do not think we do at the present time.

Mr. YATES. I did not ask you your exact figure for the mill cost, although the mill costs of the other companies would probably be analogous to yours.

Are your mill costs higher than those of 14.3 as indicated in this public document, at that time?

Mr. DAVIS. At that time——

Mr. YATES. In 1956?

Mr. DAVIS. I doubt if they were at that time. I think that currently our mill costs and their mill costs are approximately the same. It becomes a very difficult comparison to make, it depends on how it is booked and how every single entry is made.

As a general statement, it is our conviction that currently our costs and the costs of our American competitors are running approximately the same.

Mr. SHEEHAN. In order to make any mill costs comparable they would all have to have standard accounting systems which you do not have, is that right?

Mr. DAVIS. I would assume that the accounting systems differ.

Mr. YATES. Does this mean that the table that appears in decision has no significance at all?

Mr. DAVIS. I think it is significant, yes indeed, I do not know how exact it is.

Mr. YATES. You would not say that it was not exact in the figuring of the mill costs of those companies at that time, would you?

Mr. DAVIS. I think that it is a very good indication.

Mr. YATES. Even though they may not have the same type of accounting systems?

Mr. DAVIS. Yes, sir, I believe those costs were based upon assumption that they were all asked of us.

I am not sure.

Mr. YATES. If your costs are the same how can they be reconciled with the statement made to us in 1955 you stated, in contrast—strike that—the fundamental reason why Canada, is the one—strike that too, in all of the principal industrial countries of the free world, fabricated capacities of aluminum industry exceeds the ingot capacity.

The fundamental reason why Canada is one exception is that Canada possesses exceptional advantages for production of economical production of ingot should not your mill costs be lower?

Mr. DAVIS. I believe it will be lower over the long run.

Mr. YATES. You indicated that as of 1956 you thought it was lower, now you think it is about the same?

Mr. DAVIS. That is correct. And the basic reason is, Mr. Chairman, that we have invested tremendous amounts in hydroelectric facilities which are not being fully utilized. When those facilities

are fully utilized, and over a period of years, as inflation develops, we believe we will have an advantage.

At the moment we do not have.

Mr. YATES. This assumes that you are operating to full capacity, that all are operating to full capacity, or does it, or to comparable capacity.

If you have 20 percent of your plants idle and the others are working full, obviously you cannot get the advantage.

Mr. DAVIS. That is true. In my thinking at least I am not taking that into account.

I say if we are operating at about our capacity today and they are operating at about their capacity, our costs are comparable to theirs currently.

I would hope and expect in the years ahead we will have certain cost advantages as we have had in the past.

The fact they are comparable today does not change our conviction that Canada today is a good place to make aluminum and offers sound economical advantages in the long run.

Mr. YATES. When you say comparable costs, let me ask you this question: I read from the chart: Alcoa's mill cost was 13.82, Reynolds was 13.63, Kaiser was 14.28; in the production of ingots there is not much difference or is there—did you say "Yes"?

I saw you nod your head.

Mr. DAVIS. Yes.

Mr. YATES. There is a significant difference between 13.63 and 14.28 in terms of manufacture.

Mr. DAVIS. Yes; there is.

Mr. YATES. And the one that has the lower mill cost has the significant competitive advantages, is that right?

Mr. DAVIS. To the extent of that difference, a cent a pound may spread over a billion pounds, if it is, it becomes significant.

Mr. YATES. If you were operating at full capacity, would you have the benefit of the power advantages that you testified to?

Mr. DAVIS. No, sir; we would not. We have developed power considerably in excess of our smelter capacity. In due course, of course, we hope and believe and expect to use all of that power for the development of aluminum, but currently we do not.

Mr. YATES. Does your company buy scrap?

Mr. DAVIS. We may buy scrap in certain countries. We do not buy scrap down here.

Mr. YATES. In the United States?

Mr. DAVIS In the United States, we do not buy scrap.

Mr. YATES. Is it possible for discounts to be given through arrangements between producers—discounts for the purchase of primary metal?

Mr. DAVIS. I am not sure I know how to answer. I do not think I can answer that intelligently. I do not know.

Mr. YATES. Do you buy scrap in England?

Mr. DAVIS. I do not know the answer to that, Mr. Chairman. Maybe I could find out.

Mr. YATES. You are not apparently a significant scrap purchaser.

Mr. DAVIS. No, sir; I do not believe we are.

Mr. YATES. You make your own metal, and so forth.

Mr. DAVIS. Yes.

Mr. YATES. In order that the record may be complete, would you state what costs go into the final price of your product after the mill cost. You indicated that there were certain overheads. Can you identify that more specifically?

Mr. DAVIS. Certainly, interest on money, all other overhead expenses would be an additional cost. Selling expenses would be an additional cost. Freight, and so forth.

Mr. YATES. What portion of the total price is mill cost?

Mr. DAVIS. Mr. Chairman, if I answer that, I give my mill costs.

Mr. YATES. You have not given us a mill cost?

Mr. DAVIS. No.

Mr. YATES. Is it 50 percent?

Mr. DAVIS. It is more than that.

Mr. YATES. It is more than that?

Mr. DAVIS. More than 50 percent.

Mr. YATES. What percentage of total cost is the mill cost, if you do not know your costs?

Mr. DAVIS. Of the total costs?

Mr. YATES. Yes.

Mr. DAVIS. I beg your pardon. Of the total costs. I cannot give you that figure from out of my mind. I would think—this is purely an estimate—that it might approximate 75 percent. It would vary substantially from company to company.

For example, in our case we have borrowed large amounts of money to finance power developments and our interest charges are, I think, higher on a per-pound-of-production basis than would be the case, for example, of Alcoa or Kaiser. It becomes extremely complicated when you go into a comparison of that nature.

Mr. YATES. Is it possible for you to obtain the proportion of total costs and furnish it for the committee?

Mr. DAVIS. Mr. Chairman, even mill costs, is hard enough to obtain. Our mill costs differs substantially from plant to plant.

Mr. YATES. You have an overall mill cost.

Mr. DAVIS. There is an average mill cost which could be calculated.

Mr. YATES. All right. Will you give it? Do not give us the average mill cost. Give us what percentage of your average total cost the mill cost is.

Mr. DAVIS. May I consider that, Mr. Chairman? I would like to know what it involves.

Mr. YATES. All right.

Mr. DAVIS. And it is, in fact, difficult to determine what your total cost is. For example, we have overheads, some of which are applicable to fabricating, in certain countries. It depends upon how we would allocate the overhead between ingot and fabricating.

Mr. YATES. Is there a difference in your cost systems?

Mr. DAVIS. We do very clearly in the mill cost.

Mr. YATES. I am interested only in this.

Mr. DAVIS. We would make a very clear distinction there.

Mr. YATES. Suppose we defer that. We will ask you about that again.

Mr. DAVIS. Yes.

Mr. YATES. I do not think there is any revelation of any competitive secrets to any of your competitors. The committee has in the past sought to avoid bringing out any confidential data. We do not propose to do it now. Inasmuch as we do not know what your mill cost is, except in the abstract, it is rather an intangible matter, but we would like to know what the percentages are.

Mr. DAVIS. May we look into that, Mr. Chairman?

Mr. YATES. Yes.

Are you familiar at all with the contract with General Motors for the furnishing of so-called hot metal?

Mr. DAVIS. In a general way, yes, sir, Mr. Chairman.

Mr. YATES. Have you had occasion to read the transcript of the hearings?

Mr. DAVIS. I have read the transcript.

Mr. YATES. Does it cost Alcan 1 cent or 2 cents to make pig or ingot?

Mr. DAVIS. No, sir.

Mr. YATES. Could you give in confidence, would you tell us what that figure would be?

Mr. DAVIS. I do not know precisely what the figure of direct costs would be, but I feel fairly sure it would be under a cent per pound.

Mr. YATES. Under a cent?

Mr. DAVIS. I am quite sure about that. I would like to correct that statement if it is wrong. That is the direct cost, Mr. Chairman. There may be other matters involved.

Mr. YATES. In your judgment, is hot metal another form of ingot or pig?

Mr. DAVIS. I do not know.

Mr. YATES. Another form of aluminum rather than pig or ingot—is it a fourth metal?

Mr. DAVIS. I think that becomes a question of legal definition, Mr. Chairman.

Mr. YATES. It may ultimately come to that. But you are in the aluminum business and have been for a number of years. Do you consider hot metal a different type of metal?

Mr. DAVIS. It is the same metal in a different form.

Mr. YATES. Have you ever considered entering into such contracts?

Mr. DAVIS. We have not entered into any serious negotiations looking toward hot-metal contracts.

Mr. YATES. Have offers been made to you?

Mr. DAVIS. We have been consulted about the possibility. Of course, in our particular case, all of our smelting facilities are in Canada. And hot-metal contracts would not be well adapted; in fact, it would be a physical impossibility to enter into a hot-metal contract in the United States.

Mr. YATES. Does not Ford have an ingot plant?

Mr. DAVIS. Yes, they do.

Mr. YATES. Do you supply hot metal to them?

Mr. DAVIS. I do not think we have been approached by Ford.

Mr. YATES. By any company?

Mr. DAVIS. I believe there were some discussions with General Motors, which did not progress very far.

Mr. YATES. Do you see this as a trend in the industry, the movement toward the supply of hot metal?

Mr. DAVIS. I wish I knew the answer to that, Mr. Chairman. It is a new and interesting development in the industry. It raises an interesting question. Certainly, we do not presume to have all of the answers to it.

Mr. RIEHLMAN. Is your company interested in negotiating on that basis with Ford or General Motors?

Mr. DAVIS. No, sir; we are not.

Mr. RIEHLMAN. Have you made any particular study of it?

Mr. DAVIS. Yes, we have considered it.

Mr. RIEHLMAN. You do not think it is feasible?

Mr. DAVIS. But we have felt in our case that we would not like to do it.

Mr. RIEHLMAN. You would not like to do it?

Mr. DAVIS. No.

Mr. YATES. In previous hearings the United States producers have indicated there is much more profit in fabricating than in primary metal.

If that is true, why not sell in that field?

Mr. DAVIS. Mr. Chairman, I think our experience has indicated that in the markets in which we fabricate, we have not made as much profit fabricating as we have in our ingot business.

I think, however, in the United States, it is pretty generally agreed that there has been more money made in fabricating than in smelting.

That has not been the case with us.

Mr. YATES. Why is that?

Mr. DAVIS. Over a period of years——

Mr. YATES. You have the competitive advantages in production of the primary metal. Your statement indicated that you have experience and you are giving the benefit of that experience to the smaller business people?

Mr. DAVIS. Yes.

Mr. YATES. On the basis of that testimony, why should not you be in such a position?

Mr. DAVIS. This would require careful study, Mr. Chairman. But my first reaction is that in the first instance, while today our ingot costs may be comparable to those of the United States producers, over a period of time, we have had, we believe, lower ingot costs, than the United States producers.

Consequently, I think we have enjoyed somewhat higher profit margins than they may have enjoyed.

Mr. YATVS. Is that true today?

Mr. DAVIS. That is not true today; no, sir.

So that would be a consideration in our study of it, over a period of years, and naturally, this comparison would have to be made over a period of years.

On the other hand, I believe it is also the case that in many areas in which we fabricate, we are developing the market very actively, and we are not making the profit that would be made in a fully developed market.

Mr. YATES. Would it be possible for you to return tomorrow morning so that the other members of the committee can finish their questions?

Mr. DAVIS. Unfortunately, I have a meeting with someone coming from Europe tomorrow in Boston.

Mr. YATES. Can you return at a later time?

Mr. DAVIS. Yes, sir.

Mr. YATES. Can we leave it this way then, Mr. Davis: May we discuss in committee the date of holding meetings at a future date?

We have a bill under active consideration this afternoon which precludes our going on.

I wish to express our regret to other witnesses who have come down today, that we cannot hear them today.

I hope they can return.

Would next week be convenient for you?

Mr. DAVIS. Yes, sir; next week would be convenient.

Mr. YATES. Suppose then that we have the meetings later and we will let you know.

The committee will now stand in recess until 10 o'clock tomorrow.

Thank you very much.

(Whereupon, at 12 noon, the committee was recessed until 10 a. m., Wednesday, March 12, 1958.)

ALUMINUM INDUSTRY

WEDNESDAY, MARCH 12, 1958

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON MINERALS AND
RAW MATERIALS OF THE SELECT COMMITTEE
TO CONDUCT A STUDY AND INVESTIGATION
OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10:15 a. m., in room 1334, New House Office Building, Hon. Sidney R. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding); Sheehan, and Riehlman.

Also present: Irving Maness, counsel; Bert Z. Goodwin, special assistant counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The committee will come to order.

Mr. Davis.

TESTIMONY OF NATHANAEL V. DAVIS, PRESIDENT, ALUMINIUM, LTD.; ACCOMPANIED BY ERIC F. WEST, PRESIDENT, ALUMINIUM LIMITED SALES, INC.—Resumed

Mr. YATES. We are pleased you could be with us again this morning.

I understand there are certain corrections you want to make in yesterday's record.

Mr. DAVIS. Yes, Mr. Yates, if we may make one correction at this time.

Mr. YATES. Where should that be made?

Mr. DAVIS. It starts on the bottom of page 390 in the testimony, where you were asking me whether a difference in the mill cost amounting to about 0.6 cent a pound was a significant difference in relation to the competitive position of various producers in this market. My answer at that time was "Yes."

I would like to correct that answer. I do not consider a spread of that magnitude to have any significant effect upon the competitive position of producers in this market. It is small in relation to total cost.

Mr. YATES. The record may show that correction.

Do you have another one?

Mr. DAVIS. I believe, Mr. Yates, we corrected what appears to have been a typographical error at the bottom of page 388, with reference to your question.

Mr. YATES. Let the record be corrected to show, in my question at the bottom of page 388 where it says:

You would not say that it was not exact in the figuring of the mill costs of those companies for the time being

the words "for the time being" should be stricken, and the words "at that time" should be inserted.

With those corrections, we will proceed.

Mr. Davis, in this morning's Washington Post I noticed a very handsome picture of you and myself, apparently discussing the hearing, and underneath it says:

The Aluminum president testified that imports of Canadian primary ingot helped small business in the United States.

I did not notice we had gotten around to that yesterday, and I think perhaps we ought to cover it this morning.

Mr. DAVIS. Yes, sir.

Mr. YATES. And the impression I have from the testimony is that Alcan has established that it is in a position to help small business. The impression I have, however, is that it is not actually helping small business, and that is what I think we ought to clear up this morning.

You stated as part of your main statement yesterday, and the excerpt to which I have reference appears at page 339 of the transcript—do you have a copy of either your statement or the transcript?

Mr. DAVIS. I have a copy of both, Mr. Yates.

Mr. YATES. You stated:

As to the future position of the independents as a group, it has perhaps best been commented on by the committee itself:

"In periods of shortage or abundant supply, the position of the small independent fabricators is a difficult one. When there is no shortage of raw material, the small fabricator must face increased emphasis by the primary producers on the sale of their own finished or semifinished products."

Then you go on to say:

If there is a long-range remedy here, it would seem to lie in the direction of assuring the permanence and vitality of a noncompetitive source of supply of metal. This is a service we are willing and anxious to provide, supported quite naturally by our own self-interest.

Are you really a noncompetitive source of metal? Are you noncompetitive in the supply of primary metal? Or are you competitive?

Mr. DAVIS. We believe we are competitive in supplying primary metal to our customers in this country. But I have been very remiss in my duties if I have left the impression that we do not consider ourselves as being of help to the independent fabricator.

Mr. YATES. In your testimony in 1955, your statements were directed to independent fabricators rather than small-business fabricators. In response to a question which I asked at that time, "Do you consider General Motors to be an independent?" you stated, "Yes."

Mr. DAVIS. Yes, sir.

Mr. YATES. Forty percent, I think, of your total production, I believe is sold in the United States; is it not?

Mr. DAVIS. That is correct, Mr. Yates.

Mr. YATES. And what portion of this goes to small business?

Mr. DAVIS. Mr. Chairman, I think I can give you some figures there.

Mr. YATES. Perhaps we ought to make clear what we mean by "small business," too, so that we can get some comprehension of what your answer is. What do you mean by "small business" in terms of your answer?

Mr. DAVIS. Mr. Chairman, I think we would feel that any business employing less than 500 would properly be classified as small business. I understand from reading the testimony that there may be two definitions of small business. But we have a breakdown here of our customers in 3 different categories: those who employ 100 or less people, those who employ between 100 and 500, and those who employ 500 and over. And the figures I will give you, if you care to have them, exclude Harvey, Olin, and Revere, as well as the other producers. Our total number of customers in this category, therefore, in 1957, came to 131. Forty-seven of the 131 customers fell into the category of customers employing 100 or less; 42 were in the category of 100 to 500 employees; and 42 were in the category of 500 and over.

Perhaps you would also like to have the percentage of sales to those three categories.

Mr. YATES. Yes.

Mr. DAVIS. In the first category, those employing less than 100, that category absorbed 17.1 percent of our 1957 sales. The second category, employing between 100 and 500, purchased about 25.1 percent of our sales to this group. And the third and larger category, 57.8 percent.

Mr. YATES. Why is Alcan unique in being a noncompetitive source of supply of metal in this respect? Do not the other primary producers sell to small-business firms just as you do? I am sure if we called Mr. Wilmot in, or Mr. Rhodes or Mr. Reynolds or Mr. McConnell, they would give us comparable statistics showing that they, too, sell to small-business firms just as you do.

Why, then, is Alcan unique in setting itself up as a noncompetitive source of metal and, therefore, presumably a champion of small business?

Mr. DAVIS. We are unique in the sense that we are the sole supplier of primary ingot in this market that does not compete with our customers in semifabricated or fabricated products. I use the term "noncompetitive" in that sense of the word.

Mr. YATES. I see. Then, insofar as the small-business man has difficulty in times of shortage in obtaining primary metal from those with whom he competes in fabrication, he would also have a similar difficulty in obtaining it from you, as we witnessed 3 years ago in 1955.

Mr. DAVIS. That was the case at that time, Mr. Yates.

Mr. YATES. And when a small-business man complains, as some have, to this committee that they are caught in a price squeeze because the price of primary metal is a rather high figure, higher than it has been, 26 cents, and the price at which the primary producers who do fabricate sell their fabricated products, it is not a comparable increase in their price he can put in a price increase—there is no relief offered by a company like Alcan by selling at a lower price for its primary metal; is there?

Mr. DAVIS. No. We have not been able to offer relief by selling at a lower price, selling our primary ingot at a lower price, for reasons which I tried to explain yesterday.

Mr. YATES. That was the tariff.

Mr. DAVIS. That is an important consideration for us. However, Mr. Yates, I would like to point out that to the extent that the independent fabricators have suffered, if they have suffered, from the so-called squeeze, we have not participated in that to any extent because we are not fabricators in this country.

Mr. YATES. Well, you have participated in the same sense that other producers of primary metal have participated in establishing the price which gives rise to the squeeze.

Mr. DAVIS. Mr. Chairman, I imagine it is a question of the chicken or the egg. Where does the squeeze arise? Is it not the differential between the price of primary ingots and the price of primary products?

Mr. YATES. The squeeze would not exist, would it, if you were selling at a lower price?

Mr. DAVIS. I think it might continue to exist, Mr. Yates, because if, for example, we were to lower our price today, I think there is every likelihood that our competitors would lower their prices immediately, and if the price of fabricated materials were also to be lowered, there would be no change.

Mr. YATES. This assumes that the other end of the stick will follow, too, namely, that if the prices are increased, the prices of fabrication will go up comparably, too. Small-business people who have complained say that they have not gone up to the same extent as prices of primary metal have gone up, and of course this is what makes the squeeze.

Are you as fearful of the possibility of imposition of tariff if you lower your price as you are of the competitive price wars which might result from the other producers?

Mr. DAVIS. We are fearful of tariff or other retaliatory acts of that nature.

Mr. YATES. Of the tariff alone rather than the competition which might result from the other producers?

Mr. DAVIS. We are ready to meet competition anywhere, sir.

Mr. Chairman, may I also add, although I hope it is clear from the reading of our statement, that we feel we have done a great deal to be of assistance to many of the independent fabricators by supplying them with technical and other help.

That, I believe, is an important consideration. And I attempted yesterday in the statement to describe the forms taken by the technical help we are giving.

Mr. YATES. Is this unique for Alcan, or cannot all the producers furnish this type of service?

Mr. DAVIS. Mr. Chairman, I think there is a difference, in this respect: I believe we are more inclined to give technical assistance to customers in the field of rolling, extruding, and in the fields in which they convert primary metal in the semifinished or semifabricated materials.

I believe I am correct in saying that, but naturally the American producers can speak better than I can on that: that a large part of the technical help given by the American producers is further along the line of fabrication to their thousands of customers, many of whom buy semifabricated products as their raw material to begin with, whereas our technical help has been directed in the main to people

who start with primary metal and who convert that metal into semi-fabricated and fabricated products.

I do believe there is a distinction between the sort of technical help we are prepared to offer and the technical help offered by the American producers.

Mr. YATES. Is Alcan not in a better position to claim that it offers less competition to the small-business man in this country by the fact, too, that it does not engage in purchasing scrap?

Mr. DAVIS. Yes, I think that is a consideration.

Mr. YATES. Is not the purchase of scrap by the large companies one of the major causes of complaints today by some of the small-business people in the field?

Mr. DAVIS. I have heard many complaints along those lines, Mr. Chairman, but I do not feel that I am in a good position to comment on that. We are not close to the scrap business at all, and we are not purchasers of scrap.

Mr. YATES. Why are you not purchasers of scrap?

Mr. DAVIS. I find that difficult to answer, Mr. Chairman.

Mr. YATES. You must have considered it.

Mr. DAVIS. I am sure we have, but I think we have felt that it is business we would not like to get into.

Mr. YATES. All of the other primary producers purchase scrap, do they not?

Mr. DAVIS. That is my understanding, Mr. Chairman.

Mr. SHEEHAN. In order to purchase scrap, you have to have a plant to process it.

Mr. DAVIS. That is correct.

Mr. SHEEHAN. And you have none?

Mr. DAVIS. We have no plant facilities in the United States.

Mr. SHEEHAN. You would not want to buy it in Oklahoma and ship it to Canada?

Mr. DAVIS. That would be impractical. That is a consideration in this market, certainly. But I believe we also follow that policy in most of our other markets as well as where we may actually have facilities to handle scrap.

Mr. YATES. Do you buy scrap in Canada?

Mr. DAVIS. It is my understanding that we are not purchasers of scrap, at least on any scale.

Mr. YATES. Yesterday you spoke of such things as loyalty discounts in the United Kingdom. Are there other discounts that you give other than loyalty discounts?

Mr. DAVIS. No, sir; none at all.

Mr. YATES. Do you give loyalty discounts in other countries than the United Kingdom?

Mr. DAVIS. No. We have instituted the loyalty discount only in the United Kingdom market, and for very specific purposes.

Mr. YATES. I have been taking too much time, and I think I ought to yield to Mr. Sheehan and Mr. Riehlman at this time.

Mr. SHEEHAN. Today Aluminium, Ltd., is a United States corporation, is it not?

Mr. DAVIS. No; it is a Canadian corporation.

Mr. SHEEHAN. How about the Aluminium Company of Canada?

Mr. DAVIS. That is also a Canadian corporation.

Mr. SHEEHAN. In other words, you are here only because you have sales offices in this country, is that right?

Mr. DAVIS. The United States is a very important market for us.

Mr. SHEEHAN. I mean, in your capacity testifying here, you are actually testifying as a foreign corporation?

Mr. DAVIS. Yes, sir.

Mr. SHEEHAN. I just wanted to get that straight for the record and for my own information. You stated that you manufacture a far smaller percentage of the metal than any of the privately owned aluminum companies. That may be true at this time. Do you contemplate any change in that in order to meet competitive conditions?

Mr. DAVIS. As a general statement, I would say "No," Mr. Sheehan; over a period of years the pendulum naturally swings back and forth between expanding ingot and expanding fabricating facilities. At the present time we have stopped expansion of ingot facilities, and we are putting more emphasis on the expansion of fabricating facilities in many parts of the world.

However, unless there is a radical change in our policy—and I do not see it at this time—I expect that we will continue to be a much larger producer of ingot than we are a fabricator of aluminum.

Mr. SHEEHAN. On page 4 of your statement you made a comment or a reference to the fact that during 1956 and 1957, several of the independents were absorbed by primary producers, existing and potential. Do you feel that is going to be a trend in the industry?

Mr. DAVIS. Mr. Sheehan, I do not know the answer to that. It is a matter that has concerned us a great deal. And if it does become a trend, it would be serious from our viewpoint. I do not feel that we have the answer to that. It is a great question whether the aluminum industry, for example, will follow the trend of some of the other industries, or whether it will not.

Mr. SHEEHAN. You would not want to make an educated guess as to whether it might or might not?

Mr. DAVIS. We continue to feel, although there is considerable discussion among us, that there is a proper place in the industry for vigorous, independent, nonintegrated fabricators. And we hope, and I think we are inclined to believe, that they will maintain and improve their position over a period of time.

Mr. SHEEHAN. In the hearings last November, one of the gentlemen testifying stated that small business, meaning the fabricators and so forth, cannot by itself make major efforts in developing products and techniques. And he pointed out that this particular company had spent a lot of time and effort in helping these smaller men. And your response to Mr. Yates stated that your company operated similar facilities, and in your statement you talk about operating research laboratories in Canada for that purpose. Could you give the committee any idea of, say, the amount of money you spend in helping these people? Is it small or large? Have you any idea of the amount?

Mr. DAVIS. I think it would be very difficult to determine precisely what part of our research and development expenditures can be attributed to assisting independent fabricators here. But it would, I am sure, be significant.

Mr. SHEEHAN. Would you have any idea of, say, the number of people you have employed for that specific purpose?

Mr. DAVIS. I would like to ask Mr. West if he could help me on that.

Mr. Sheehan, this may not be a direct answer to your question, because I do not think we have a breakdown of the number of employees who are responsible solely for assisting the independent fabricators in this country. But I have here, I looked into it before I came down here, about 4 pages of instances where, during the past year or so, we have provided help to the independent fabricators.

And my reaction, when we gathered all the information together, was that we had done a great deal more than I thought we had done.

Mr. SHEEHAN. I think it would be helpful to the committee maybe sometime if you would provide some of that information, because just to make a statement that you are helpful, without backing it up with facts, is not very satisfactory.

You mentioned in your statement that apparently your company has considerable fabricating knowledge from large and small fabricating plants in such countries as Canada, England, or Switzerland. Do you have any ownership or control in those plants either directly or indirectly?

(The material referred to will be found in the appendix, p. 465.)

Mr. DAVIS. Yes, sir; we were referring to our plants in those countries. They are our own facilities.

Mr. SHEEHAN. You fabricate there?

Mr. DAVIS. Yes, in many countries of the world.

Mr. SHEEHAN. Therefore, you do have the know-how and experience so that any time you wanted to get into fabricating, you can do so?

Mr. DAVIS. That is correct, Mr. Sheehan. And part of the technical help we give independents in this country is to ask them to come up and see our facilities and go through our fabricating facilities in Canada, and even abroad, if it seems appropriate.

Mr. SHEEHAN. There was quite a large amount of colloquy between yourself and Mr. Yates on the pricing in your industry. And I feel that maybe some people in reading the record might come to the conclusion that this is a situation more or less alone in the aluminum industry.

There are a great many industries that follow practically a similar price pattern, is that not true?

Mr. DAVIS. That is correct.

Mr. SHEEHAN. Would you want to give us offhand some of your thoughts on what other industries operate that way, just to show that aluminum is not the only one so operating?

Mr. DAVIS. Mr. Sheehan, I would be inclined to say that the aluminum industry has over a period of years followed a stable price pattern. I would think that would be also true in the steel industry. I think it has also been true in the case of nickel, for example.

Mr. SHEEHAN. Mr. Dalmas gave me some information, and offhand, just picking it up fast, it shows that petroleum, steel, copper, lead, zinc, cement, steel pipe, glass, plate glass, window glass, also beverage glass, sugar and flour are some of many industries wherein it seems that regardless of from whom you buy, you pay about the same price. Competition as such does not exist too much in the price field.

Mr. DAVIS. I beg your pardon, Mr. Sheehan. I think I misunderstood you. I think it is quite natural that in dealing with commodities such as aluminum that the prices are going to be the same at the same time.

Mr. SHEEHAN. I just did not want the record to show that the aluminum industry was the only one where the price pattern was the——

Mr. DAVIS. No, not in that sense.

Mr. SHEEHAN. If you followed our record over the last couple of years, I think in your testimony when you testified 2 years ago—if my memory is right, the question was put to you about the concern of certain people regarding expansion in the industry, and there were even some thoughts that our Government should take a hand in expanding the aluminum industry. And I know I pointed out specifically at that time what would happen if there was too much metal to sell.

We were quite concerned 2 years ago about not enough metal, and I think your industry—well, maybe you would want to comment. What position would your industry have been in today if the Government suddenly embarked on a program of expansion in order to provide more aluminum?

Mr. DAVIS. I think, Mr. Sheehan, if there had not been the encouragement of Government expansion in this country, that supply and demand would be more closely in relation one to the other than is actually the case today.

Mr. SHEEHAN. Do you think, in your personal opinion, that there is any need for the Government to step in now or in the immediate future in order to provide plant facilities for the production of aluminum?

Mr. DAVIS. Certainly I see no need under present circumstances.

Mr. SHEEHAN. You might change 2 years from now?

Mr. DAVIS. Mr. Sheehan, I think there is a great deal of capacity coming into production over the period of the next 2 to 3 years, and the problem of the industry during the period of the next 2 to 3 years will be to enlarge the market for all of the new production that is coming in.

Mr. SHEEHAN. I am not sure of my figures, but in the November hearings, several of the gentlemen thought there were 4 billion pounds, I believe, of aluminum produced today, and by 1965 there would be need for about double that quantity. Do you have any thoughts on this?

Mr. DAVIS. Mr. Sheehan, we do make our own estimates of future production and demand. It is naturally forecasting and fraught with danger. Our current thinking on that matter is that there is likely to be adequate supplies of aluminum for all comers into the early 1960's. And there are many production projects on the drawing boards, so to speak, which can be brought into production to increase the supply substantially over that even now planned.

Mr. SHEEHAN. Since 1946, as you know, there have been alternate shortages and excesses of aluminum. Our committee originally entered into these hearings with the thought of being helpful to small business.

I fully realize the position of your company, where you are catering to small business in this country, and I may be asking a question in which you have a lot of self-interest. But assuming we could look at it coldly and broadly, do you think our hearings have been of any benefit in helping small business?

Mr. DAVIS. Yes, sir, I do.

Mr. SHEEHAN. Do you think that the larger companies have become more conscious of the needs of small business because of our hearings?

Mr. DAVIS. Yes, sir; I do.

Mr. SHEEHAN. And would you say from your knowledge of the industry that the large producers of aluminum have tried, to a larger extent than they would have ordinarily, to cater to small business?

Mr. DAVIS. I think so, Mr. Sheehan.

Mr. SHEEHAN. It seems to me that the committee has extracted quite a bit of knowledge from people like yourself and Alcoa and Reynolds, et cetera. Is there any possible or substantial way in which the information that has come out of the hearings be helpful to your competitors or to new people starting into business?

Mr. DAVIS. Only a very small part, in my opinion, Mr. Sheehan. Prices and costs—I would like to correct that. Costs come into discussion. Although this committee has not asked for confidential information, on that, every little bit that is forthcoming does, of course, provide knowledge to potential and existing competitors. But as a general statement, I do not think there has been anything that would be of significant advantage from a competitive viewpoint for another producer, for example.

Mr. YATES. Will the gentleman yield for a moment?

Mr. SHEEHAN. Certainly.

Mr YATES. I was not aware that the committee was asking for confidential information.

Mr. DAVIS. That was my understanding. But every little bit which, viewed alone, may not be confidential, when put together with other pieces over the years form a very interesting picture and one which would assist a competitor.

Mr. YATES. This may be true. But I thought the way in which we phrased it yesterday was such that you agreed that it was not revealing confidential information. The fact that we show the percentage of your mill costs to total costs does not indicate what those costs are, does it? As a matter of fact, in 1947 you gave those costs out, did you not?

Mr. DAVIS. Yes.

Mr. YATES. So that those were available.

Mr. DAVIS. They were available at that time.

Mr. YATES. That is right. Have they changed significantly since then?

Mr. DAVIS. Indeed they have.

Mr. YATES. We are not asking for that type of information. The only information we are asking for is just the percentage, so that we could compare it with the others for committee purposes.

Mr. DAVIS. Yes, Mr. Yates. But I think this would be the first time, to my knowledge, that that figure has come out, the percentage of mill costs to total costs. I may be wrong.

Mr. SHEEHAN. If my memory is right—Mr. Davis, you would know about that—but I think at various times some of the companies have provided our committee with confidential information, on the basis that it was not to be published or used; that is correct. However, aside from costs, I can assure you if I were getting into the aluminum business, it would be very beneficial to me to know a lot of the information that has been given out here, the contracts and the

prices and all those things; otherwise, a competitor would have to go and dig those up also. This way he just comes to the committee, and he knows all about the industry.

Mr. DAVIS. I would entirely agree with that, Mr. Sheehan. The information obtained by this committee is extremely valuable, put in compact form, and is readily available in one place. But I think if I answered the question differently before, it was that much of the information could be obtained with adequate digging, but it would take a lot of digging, I quite agree.

Mr. SHEEHAN. That is all, Mr. Chairman.

Mr. YATES. Mr. Riehlman.

Mr. RIEHLMAN. Mr. Davis, I think you said, or at least gave the committee the information, that the industries in Canada are expanding tremendously, and you are expanding your own facilities there. Why is it that you are not doing more fabricating in Canada?

Mr. DAVIS. There is a limit to the growth in demand, and Canada's fabricating facilities are currently well able to meet the market demand at the present time.

Mr. RIEHLMAN. I think you testified that you had a capacity of something like 150,000 tons shut down at this time; is that right?

Mr. DAVIS. That is correct.

Mr. RIEHLMAN. Well now, in view of fact you have that capacity, and you are also expanding your own facilities, do you have any idea in the future of going into the fabricating business to a greater degree, and possibly entering into the United States in the fabricating end?

Mr. DAVIS. We are expanding our fabricating facilities in many parts of the world, Mr. Riehlman, but we have not given serious consideration to entering the United States as a fabricator.

Mr. RIEHLMAN. Do you have any agreement with your customers in the United States who are fabricators that you will not come into the United States?

Mr. DAVIS. No, sir; we do not.

Mr. RIEHLMAN. What kind of procedure do you have for your sales program in the United States? Do you have a regular sales force here?

Mr. DAVIS. Yes, sir; we have have quite a large sales force. And Mr. West, on my right, is president of it. We have approximately 150 personnel in our United States selling company.

We have our main office in New York. It is an American company, and we have salesmen in Detroit, Cleveland, Chicago, Los Angeles, and Atlanta, Ga.

Mr. YATES. I am reminded that inasmuch as you have only 150 personnel, you qualify as small business.

Mr. DAVIS. Thank you, Mr. Yates. That is a compliment.

Mr. RIEHLMAN. Is it this group that you referred to several times in your statement which is equipped to give technical advice and assistance to these fabricators?

Mr. DAVIS. No, sir; not our sales personnel as much as our technical and research personnel. We operate plants, research facilities in Canada and in the United Kingdom. There are several hundred people engaged in research. And our research and development division back up the activities of our sales division in this country.

Some of the personnel in our selling company are directly concerned with technical help, but they are supported by many more people in our development and research divisions in Canada and abroad.

Mr. YATES. I just have a few more questions which I think will clear up the record.

Mr. Sheehan referred to the pricing pattern followed in the aluminum industry, and in the other metals industries. You stated that the aluminium industry followed a stable price pattern.

In his testimony before our committee, Mr. Wilmot of Alcoa, in response to the following question by Mr. Multer, gave the following answer, and this appears on page 65, will be on page 65 of the hearing when it is printed:

Mr. MULTER. We are always told in these various committee hearings that if demand exceeds the supply the price must go up. If supply exceeds the demand the price should go down. Obviously today demand is under supply. Why isn't the price going down?

Mr. Wilmot made this reply:

You are on one of my favorite topics at this point, Mr. Multer. The price of aluminum did not go up at a time when it might well have done so in relation to the skyrocketing prices of many other materials. Just to satisfy a little curiosity, I asked one of our statisticians to determine where the price of aluminum would have gone had it followed the trend of the other metals, and the price of aluminum today, instead of being 26 by that yardstick, would be 52, and if you were to trace that with copper it would have gone up at the peak to something like 68, so if we, to get on another committee hearing, were to be accused of administered prices, I think we would admit it and feel quite proud of the record that we had established.

Do you consider that the pricing structure of the aluminum industry is an administered pricing structure?

Mr. DAVIS. Mr. Yates, I do not know what is precisely meant by an "administered price." It has certainly been a stable price over a period of time. If that is the same as an administered price, then it is. But I have never been able to get clear in my mind the exact definition of an administered price.

Mr. YATES. I would think an administered price is one that is not governed by the laws of supply and demand, but is fixed without relation to that. Would you not say the prices of aluminum in the industry are fixed by the laws of supply and demand?

Mr. DAVIS. I think they are certainly influenced by the laws of supply and demand. I think they are a little slower to react and have been held in closer bounds than other comodities which have been dealt with on exchanges, for example, and which fluctuate rapidly even from day to day.

Mr. YATES. I was just going to say that during the last few years, aluminum has increased in supply, it has become more plentiful, and the price has gone up; has it not?

Mr. DAVIS. Indeed it has gone up.

Mr. YATES. Is this not in direct opposition to the ordinary operation of the law of supply and demand as we were taught it at school?

Mr. DAVIS. On a theoretical basis, Mr. Yates, I would agree that when there is an oversupply, the laws of supply and demand would work in the direction of reducing prices, and the same in the other direction.

But I would certainly agree with Mr. Wilmot's statement that aluminum during the period of extreme shortage did not go up to very high prices, and was held stable. By the same token——

Mr. YATES. Why is that?

Mr. DAVIS. I believe it was the individual decisions of all companies in the business that it would be in their interest to maintain a stable price pattern. And I also believe, Mr. Yates, that the stable price pattern which has been followed by the industry as a whole has proved very beneficial in the developing of the industry.

And if there had been wide fluctuations such as have prevailed in copper and other similar metals, it would have damaged the growth of the aluminum industry.

Mr. YATES. Did the industry, then, have the ability to change the market price by changing their own price?

Mr. DAVIS. Each individual company establishes what it considers it should charge.

Mr. YATES. Which to all intents and purposes is the price for the industry, is it not, because the others follow suit?

Mr. DAVIS. The others do follow suit, and I think that is quite natural. Aluminum is a commodity, and if one of the producers were to change his price, I think other producers would follow suit very quickly.

Mr. YATES. Is there a relationship between the price of aluminum and the costs to the company?

Mr. DAVIS. Yes; there is a relationship, but that is certainly not the only consideration in determining a price.

Mr. YATES. What other considerations are there?

Mr. DAVIS. Well, there are, I would suppose, many, many considerations which come into the determination of a price.

Mr. YATES. I mean in your industry, not in general.

Mr. DAVIS. In our industry as well. And I am sure that study could be the subject of a very interesting book.

Mr. YATES. I am sure it has been written—I am sure it has already been the subject of many congressional hearings.

Mr. DAVIS. Yes, sir.

Mr. YATES. But you stated, one, that it is not only responsive to costs, it is responsive to other factors, and I just wonder what some of the other factors might be.

Mr. DAVIS. There are several other factors. I am not sure I could mention all of them that could come to mind immediately. But the price of aluminum must have some relationship with the price of competitive materials if it is to sell; and if the market is to develop, that is a very important consideration, the price of competitive materials.

I believe that the costs of production have some bearing upon the establishment of a price, because any company must consider in the long run, and aim in the long run, not only to maintain its sales, but to maintain its sales to pay its personnel, pay the interest on its debt, and give a fair return to the shareholders who have invested risk capital in the company. All of those things must be taken into consideration.

Some of those interests are conflicting, but they must be blended into what appears to be a reasonable price.

Mr. YATES. A few moments ago you stated that the companies in the industry had decided to maintain a stable price structure during a

period of high demand when aluminum was in short supply. I think you were not willing to accept Mr. Wilmot's statement of an administered price for the price of aluminum. Would you say that there was a controlled price? Is this a natural conclusion one may draw from the statement that the industry wanted to maintain a stable price pattern?

Mr. DAVIS. I think, Mr. Yates, we are dealing with perhaps two questions here. I think it is quite natural that the price of aluminum at any one time would be the same from alternative sources of supply. That is one point.

I think the record would indicate that those in the industry, both in North America and abroad, have traditionally followed a policy of maintaining stability of price. That is the result of the individual consideration by each and every company concerned.

Mr. YATES. Perhaps we are dealing in semantics here.

Mr. DAVIS. It may be we are.

Mr. SHEEHAN. Mr. Davis, I assume offhand—I know the total amount of your aluminum is known at the end of the year. You have furnished those figures to the committee; is that not right?

Mr. DAVIS. The total amount of our production?

Mr. SHEEHAN. Yes, the tonnage.

Mr. DAVIS. Yes.

Mr. SHEEHAN. And of course from the statements, if you have a corporation, you put out a figure showing the total amount of profits you have at the end of the year. And dividing one by the other—and I do not know what they are—could you give us a guess, as to your net profit to the stockholders, after taxes, per pound of aluminum?

Mr. DAVIS. I would have to figure that out, Mr. Sheehan, and it would not be an easy calculation, because it would require determining what percentage of profit was attributable to ingot business, what percentage of the profit was attributable to fabrication, and to the many other products which the company sells.

Mr. SHEEHAN. Well, the point I am trying to bring out in these hearings is, we have been talking quite a bit about reducing the prices or raising the prices, whatever the case may be, and if your profits per pound of the aluminum you have manufactured were at, say, a half a cent, or a cent, or a quarter of a cent, certainly you could not do a lot toward reducing or changing the prices where it would have an appreciable effect on the market.

Mr. DAVIS. I understand, Mr. Sheehan. I do not know whether you would agree with me, but I think a better and safer measure would be the profit on the investment. And if a study were to be made of the aluminum industry today, I feel quite sure that the profit on investment at current prices is low in relation to many other industries.

Mr. SHEEHAN. Well, I do not think that would bring out the point I am trying to make. Let me put it this way: You are selling aluminum for 26 cents a pound. Supposing the profits—let's stretch our imagination—were 10 cents a pound, your net profits. Certainly in relation of 10 cents to 26 cents, you could really seriously think about reducing the price of that at one time or another.

Mr. DAVIS. Yes, sir.

Mr. SHEEHAN. If your profits per pound were only a half a cent or a quarter of a cent or a cent, then any reduction you might make in order to compute your profits would not benefit the consumer other than just slightly.

Mr. DAVIS. Yes, sir; in the long run.

Mr. SHEEHAN. So maybe if you could get those figures, it might help our thinking.

Mr. DAVIS. Well, Mr. Sheehan, it would be very easy to divide our profits or the profits of any of the other producers into their sales of ingot for a given year, for example, to determine the profit per pound of sales. But we sell many other products besides ingot, as do the other aluminum producers, and it would be necessary to break down the profit margins as between the various products which are being sold. And that would be quite a difficult calculation to make.

There are hundreds of fabricated products, there are several ingot products, and then in our case, for example—and I am sure it is the case of other producers—we sell chemicals, we sell shipping services, we sell magnesium, and all of those things would have to be calculated to determine the profit per pound of ingot sales.

Mr. SHEEHAN. I can see it would be very difficult.

Mr. DAVIS. It would be a difficult computation.

Mr. YATES. If I may return to the discussion about administered price for a moment in your statement that you propose to—rather, that the industry proposes to maintain a stable price structure, the fact is that the industry was able to maintain a stable price structure, and has been, so that when Mr. Wilmot speaks of an administered price, presumably he is talking of the same thing, is he not?

Mr. DAVIS. I think he is referring to a stable price.

Mr. YATES. Have your exports to the United States remained steady for the last 5 or 6 years?

Mr. DAVIS. As a general statement, yes, Mr. Yates. I can give you the figures.

Mr. YATES. I would like for you to furnish those figures for the record. I think your letter which we have read into the record indicated this. I quote from it:

> Our total sales to all customers in the United States have remained at about 200,000 tons for each of the last 5 years, more than half of this going to the independents, the balance to domestic producers which have been regular buyers since World War II.

Mr. DAVIS. Yes, sir; that is correct.

Mr. YATES. My question is, Why have your exports remained constant if your capability has extended?

Mr. DAVIS. We have not been able to sell more. We would like to see that figure increase, Mr. Yates.

Mr. YATES. Would it not increase if you reduce the price?

Mr. DAVIS. I am not sure.

Mr. YATES. Do you not think you might try it?

Mr. DAVIS. Well, Mr. Yates, we get back to the point we discussed yesterday.

Mr. YATES. I do not think I would worry much about the tariff, if I were you.

Mr. DAVIS. I am delighted to hear you say that.

Mr. YATES. You are more worried about the tariff than you are of the competition of the other companies, are you not?

Mr. DAVIS. Yes; indeed, we are.

Mr. YATES. You are not worried about the competition of other companies?

Mr. DAVIS. We are prepared to meet their competition.

Mr. YATES. Can it be that one of the reasons for the present price of 26 cents is the fact that the Government is buying the output of the primary producers—I should say the American primary producers?

Mr. DAVIS. I do not know how that can be answered precisely, Mr. Yates. Unquestionably the fact that the Government is buying production that would otherwise be surplus has an effect upon demand.

Mr. YATES. All other metals which skyrocketed during periods of shortage have now come down to low levels again, have they not?

Mr. DAVIS. Yes; they have, Mr. Yates.

Mr. YATES. Only aluminum maintains a trend of rising prices.

Mr. DAVIS. If you are comparing it with lead or zinc or copper, but not with many other products—steel, for example.

Mr. YATES. Has steel not come down in price?

Mr. DAVIS. No, sir; it has gone up in price.

Mr. YATES. Has steel gone up?

Mr. DAVIS. There are, I would say, many, many products, as we all know, that have gone up in price, and are even under today's circumstances going up.

Mr. YATES. I am not as familiar with steel as I should be. Is it in short supply?

Mr. DAVIS. No, sir.

Mr. YATES. Are all types of steel in long supply? I thought construction steel and——

Mr. DAVIS. I do not know enough about the industry to say that any specific segments are in short supply, but certainly steel production is down to relatively low levels.

Mr. YATES. Mr. Davis, what effect will the Reynolds contract with General Motors and Ford for the supply of molten metal have upon small business in the industry?

Mr. DAVIS. Mr. Chairman, I do not feel as if I am an expert on that. But my impression is that small business will provide a smaller percentage of such products that are now being made from hot metal than would otherwise be the case.

I would like to emphasize the word "percentage." But I am sure there are others here and others who will testify who have much better knowledge of that position than I do.

Mr. YATES. Will small-business men in the smelting business be able to compete?

Mr. DAVIS. In the secondary smelting business?

Mr. YATES. Yes, in the face of an operation of that kind.

Mr. DAVIS. I believe it makes it more difficult for them.

Mr. YATES. Would you say that was an understatement?

Mr. DAVIS. I think they can tell better than we can tell.

Mr. YATES. In an article in the Evening Star on Tuesday, March 11, Sylvia Porter talks about the "Triumph of Giantism." She refers to a quotation from a previous report of this committee saying:

> Within 18 years, all manufacturing business and most of the distribution and service business of the Nation will be controlled by corporations having more than $100 million of assets.

Your testimony yesterday indicated we were still in the merger trend, and that big business was getting bigger. She points out that small business failures are intensifying, that the number of new businesses coming into being is diminishing.

What is the situation in the aluminum industry? What does your research indicate? Are there more small business companies coming into your field?

Mr. DAVIS. Well, Mr. Chairman, the figures we follow are the figures which we gave in our statement yesterday, and they relate particularly to the segment of the industry that is a purchaser of primary ingot and primary ingot products. And the figures submitted yesterday, I believe, indicate quite clearly that over the period 1950 to 1956, the independent fabricator improved his position in the market.

In 1957, at best it would appear that the independent fabricator maintained his position, and the likelihood is that as a result of mergers, that their position in 1957 may have been smaller than it was in 1956.

And as we said in our statement, if that is a trend—and it may be too early to say whether or not it is a trend—it would naturally be a matter of concern to us, because that is the segment of the industry we look upon as our natural long-range source of sales.

Mr. YATES. Where will you get new customers for your expanded facilities?

Mr. DAVIS. We hope the independents will continue to grow, that they will continue to rely on us. We hope they will rely on us more than they have in the past. There are certainly new product developments coming along. We are very optimistic about the long-range growth and the uses of aluminum. And in many areas, certainly, the independents should have an important part to play.

Mr. SHEEHAN. Mr. Davis, would you want to make an observation on Miss Porter's article here? She says that the big boys are going to grow and the small fellows are going to eventually be put out of business. But since 1945 in the aluminum business, have the fabricators not shown a great increase and the extruders and everyone?

Mr. DAVIS. Yes, sir. If you will look at the period 1945 to the present time, there has been a very substantial increase in the independent section of the market.

Mr. SHEEHAN. So the trend in the aluminum business has been for the smaller independents to thrive and grow in the industry—I am talking about numbers?

Mr. DAVIS. Over the period you mentioned, I think that is quite correct. And it carries between one product and another, certainly in the field of extrusions there has been a remarkable growth. And the independents have shown the greatest growth in that field. In the field of sheet and sheet products, there has not been such a large growth. I think partly because to go into the sheet business with existing techniques requires a considerable amount of capital, it involves

quite a large and substantial operation, and that, for example, is one of the subjects we are working on in our technical and research program, to see if we cannot bring along techniques and processes which will permit smaller business to enter into the field of rolling.

If that can be done, it will be naturally in our best interests, we believe, and I believe will contribute to the growth of small business.

Mr. SHEEHAN. I might add that Miss Sylvia Porter in her article also has a paragraph on the fact that taxes are a great detriment to the growth of small business. Do you not have a tax break or tax advantage in Canada over a United States corporation?

Mr. DAVIS. Our current taxes are a few percent below the current taxes paid by American firms. Our taxes currently are around 47 or 48 percent.

Mr. SHEEHAN. Five percent less than the American corporations.

Mr. DAVIS. I believe it is 52 percent here.

Mr. SHEEHAN. Yes. That is all.

Mr. YATES. I want to clear up 1 point on page 359 of the transcript. At the top you state, "We have very few long-term contracts with customers in the United Kingdom," and at the bottom of the page you say, "We have no long-term contracts in the United Kingdom."

Mr. DAVIS. Yes.

Mr. YATES. Is there a difference between those?

Mr. DAVIS. No, sir. I think the top statement should be corrected. I do not believe we have any long-term contracts in the United Kingdom.

Mr. YATES. How do you determine a market price, then?

Mr. DAVIS. We establish a price at which we are prepared to sell, and we make it public.

Mr. YATES. And that price is public?

Mr. DAVIS. That price is published.

Mr. YATES. And the published price is the market price?

Mr. DAVIS. It is our market price, Mr. Yates, but currently we are running into a great deal of competition by others who are selling at different prices.

Mr. YATES. Just to clarify 1 other point, what do we mean by long-term contract, longer than 60 days, 90 days?

Mr. DAVIS. Yes, sir, I think that would be a fair definition. perhaps 6 months might be the dividing line, but I believe I am right in saying that in the United Kingdom we might normally get orders from a customer for his requirements for the next 1, 2, or perhaps 3 months. But we do not obtain orders for his requirements for the period of a year or 2 years. That we would consider a long-term contract.

Currently, we are getting orders from our United Kingdom customers really on a hand-to-mouth basis.

Mr. YATES. Is the cost of your hydroelectric facilities figured into your mill costs?

Mr. DAVIS. Mr. Chairman, subject to correction, I believe the way mill costs are normally calculated, only the direct cost of producing the power is included in the mill cost. And inasmuch as the real cost of hydroelectric power, at least a larger percentage of the real cost of hydroelectric power, is the cost of money, that would not appear in the mill cost figure.

Mr. YATES. Well then, unutilized hydroelectric facilities do not bear upon mill cost, do they?

Mr. DAVIS. I think it would have only a very small bearing upon the mill cost figure, because the cost of—excuse me, I would like to correct that statement, Mr. Yates.

Mill cost does include depreciation, and therefore the depreciation on unused hydroelectric facilities would be included in the mill cost.

Mr. YATES. On the same basis as all of your facilities?

Mr. DAVIS. That is correct, Mr. Yates, but not the interest on borrowed money, which is also a very important cost of your hydroelectric power. But it is this sort of a complication which makes it difficult to compare, for example, mill costs in our case with mill costs in the case of a company that purchases power.

Mr. YATES. Any other questions?

Mr. RIEHLMAN. Mr. Davis, you testified that you have subsidiaries in foreign countries which fabricate. Now, do any of these subsidiaries of yours export products to the United States that are in competition with your customers here to whom you sell pig and ingot?

Mr. DAVIS. As a general statement, Mr. Riehlman, I think the answer to that is "no." There may have been instances in the past when a small amount of material manufactured by companies in which we had an interest came into the United States, but it would be insignificant, I believe.

Mr. RIEHLMAN. You feel that any amount that is exported to the United States in competition with the customers to whom you are now selling pig and ingot would be of no consequence?

Mr. DAVIS. Of no consequence, no, sir.

Mr. YATES. Mr. Dalmas.

Mr. DALMAS. No questions.

Mr. YATES. Mr. Davis, the committee thanks you very much for your testimony. We were grateful that you were able to stay over today and complete your testimony. And we are indebted to you for helping us out.

Mr. DAVIS. Thank you very much, Mr. Yates.

Mr. YATES. Thank you, Mr. West.

The next witness is Mr. Laine of the American Die Casting Institute.

TESTIMONY OF DAVID LAINE, EXECUTIVE SECRETARY, AMERICAN DIE CASTING INSTITUTE; ACCOMPANIED BY R. E. KELLERS, PROGRAMS COORDINATOR

Mr. LAINE. Mr. Yates, I have with me Mr. Kellers, who is our programs coordinator at the institute.

Mr. YATES. You may proceed, Mr. Laine.

Mr. LAINE. Mr. Chairman and gentlemen, my name is David Laine. I am executive secretary of the American Die Casting Institute, the trade association of the custom producing diecasting industry.

Mr. YATES. May I ask you a question? Do you want to read your statement, or would you like to discuss it and put it in the record?

Mr. LAINE. I prefer to read it.

That is, of the companies who produce diecastings for sale to industrial customers.

The custom producing diecasting industry is composed of the companies who produce diecastings for sale to industrial customers.

On behalf of the custom producers of diecastings and the 108 of our 125 member companies who produce aluminum alloy diecastings, I want to thank this committee not only for inviting us to express our views but also for the committee's decision to inquire into the effects of the aluminum hot metal contracts on small business.

This is particularly timely because the diecasting industry is being suffocated by a rising flow of molten aluminum. We see our future being hypothecated, our growth stunted and our very existence threatened by ruthless and discriminatory purchasing policies and marketing practices which are destroying our ability to compete for an equitable share of our principal market die-cast aluminum automotive components.

It is not very pleasant for us to find ourselves in the present predicament since the history of the diecasting industry, and its growth pattern in aluminum, indicate an almost unlimited and continuing expansion of use.

The aluminum diecasting process is a high speed method for producing accurate, engineered, metal shapes. The process has been termed the shortest way from raw material to finished part. Diecasting is the process which best epitomizes the American genius for mass production.

Current aluminum diecasting practice is less than 25 years old. Techniques and machines devised by small-business men opened new areas for aluminum fabricating, new dreams for success, new vistas of an expanding future.

The diecaster represented the perfect example of American opportunity—of the equal right to economic success through inventiveness, ingenuity, and industry. Possessed of a better process, making better metal parts, making them faster and more economically than any other process, the diecasting industry and the custom diecaster made progress. Consistent, sound, progress was recorded as the volume of aluminum diecasting production doubled and redoubled and doubled again.

With growth and success came competition. With competition came added volume. With increased use of aluminum diecastings came the desire of some large buyers to make some of their own diecastings and captive diecasting facilities were started. Expanded use continued. Competition whether from other custom producers or from captive plants could be taken in stride. All were on an equal footing and to the best man went the order. Or so it seemed.

Economic philosophies like styles or food fads are highly volatile. The hoop skirt, the new look, liver, spinach, all had their day. And, centralize, decentralize, buy, or make are all legitimate aspects of a free and dynamic American way. Or so it seemed.

Diecasters just as other businessmen, had good years and bad, profits and losses, but increasing demand for aluminum diecastings reassured the industry of its future and added expansion was prudent investment. Or so it seemed.

Volume of sales increased and brought a new factor into play: metal supply. Our small-business man, the diecaster, was now a merchant. The diecaster historically used secondary or smelters allow ingot. This he purchased from his supplier in line with quotations in American Metal Market.

When a specification called for primary metal, he had available the price lists of the primary producers. When metal supply was short and prices rose, he paid. But he know that his custom competitor and the captive facility were in the same boat and his ability to compete was relative and relatively unimpaired. Or so it seemed.

Ingenuity and know-how of the custom diecaster had opened and built new markets—sound markets. Typical of these was the application of aluminum diecastings to the fabricating of automotive component parts. Starting with small pieces for manual spark and throttle adjustment mechanisms and growing through timing gears and gasoline pump parts, the custom diecaster from the early days of Simplex and Pierce Arrow, right up to the start of World War II, designed, engineered, and produced an increasing number of aluminum die-cast parts for automobiles.

His only limit was his inventiveness and until that time his only competition was other custom diecasters. We find no record of substantial captive aluminum diecasting prior to 1942.

Following World War II came the introduction of automatic transmissions in automobiles and the use of aluminum diecastings for the major components was successfully engineered by custom diecasters.

Automobile company purchases soared to substantial levels and the desire to make (the do-it-yourself philosophy) in the auto industry led to captive facilities.

Automotive use continued to grow. Custom aluminum diecasting sales went onward and upward. Captive production also grew. Normal, steady progress was noted but competitive relationships with both custom shop and captive appeared unchanged.

I have pointed out that aluminum diecastings are produced by custom diecasters for sale to industrial customers, and that aluminum diecastings are also made by some buyers and users of diecastings in their own captive facilities for incorporation into their products.

Thus, in order to sell diecastings, the custom diecaster must be able to compete not only with other diecasters but also with the captive facility of his potential customer.

The automobile industry is the largest consumer of aluminum diecastings. Automotive use represents almost 45 percent of our total market. The automobile industry is also the major operator of captive diecasting facilities.

Thus the ability of the custom diecaster to compete with custom competitor or captive facility is most intensified in the area of automotive die castings.

The ability of the custom diecaster to compete for automotive diecastings is a matter of concern not only to the diecasting industry; it is of great importance to the aluminum industry and to the economy as a whole.

For the diecasting industry believes that despite the present imbalance of aluminum, the need for further expansion of aluminum production capacity will be a matter of urgency within 5 years.

We believe that the record of aluminum diecasting production in the past justifies this position, however, only so long as our competitive ability is unhampered and undestroyed.

We do not hesitate to tie the need for increased aluminum production capacity to the continued growth of automotive aluminum diecasting use. Nor do we hesitate to base the growth of automotive use of aluminum diecasting on the abilty of the custom diecaster to compete.

From the time that the first aluminum diecast part was adopted by a young and growing automobile industry until today's average use of 31 pounds of aluminum diecastings per car every significant or key application was originally designed and engineered by custom diecasters.

The future outline of increased automotive use of aluminum diecastings has already been drawn—and drawn in the design and engineering departments of the custom diecasters. Automobile wheels, engine blocks, brake drums, and door frames, all massive applications, have actually been produced for test purposes by custom diecasters.

In spite of their importance not one of these major applications has as yet been produced in a captive facility, although their adoption would raise today's 31-pound-per-car content to a content of 200 to 275 pounds per car.

And still other applications are possible. Rear decks, retractable top panels, seat frames, have been discussed and are being worked on by the design engineers of the custom diecasting industry.

This is a forecast of increased automotive use in a 6-million-car year of 1 to 1¼ billion pounds. This potential consumption is, in our opinion, a matter of great importance that affects the national economy and the aluminum industry as well as the custom diecaster.

This forecast is not based on hope, it is based on diecastings that exist—on diecastings made by custom diecasters. Its realization largely depends on the survival of our industry and its ability to compete with the captive diecasting facility of the automobile manufacturer.

Since 1953 that ability to compete has been in jeopardy.

Ability to compete is predicated upon numerous factors, but basic is equal and nondiscriminatory access to the supply of raw material at equal and nondiscriminatory prices.

In both these respects the current hot-metal contracts are discriminatory and have already inhibited the ability of the custom diecaster to compete and threatens to destroy it.

Deviously and naively presented as contracts for purchase and delivery of molten aluminum, these hot-metal contracts are indeed hot. They are a ruthless and arrogant scheme devised to give an air of legitimacy to flagrant discriminations in prices in return for a mutually advantageous escape from the need to compete fairly in the selling and buying of aluminum and aluminum discastings.

In concept and intent these hot-metal contracts represent a device to cover the sale by Reynolds Metal Co. to General Motors and Ford at preferential, discriminatory, prices, the same quality and grade of aluminum-casting alloy that it sells to others.

In concept and in intent these hot-metal contracts were planned to free Ford and General Motors from the need to compete for available supplies of aluminum-casting alloy in a free and open market.

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In concept and in intent these hot-metal contracts were planned to free Reynolds Metal Co. from the need to sell the output of its expanded facilities in competition, fairly and openly.

In short, it was good for Reynolds, good for Ford, good for General Motors, but not good for the rest of the country—or for small business.

The impact of these hot-metal contracts on small business is a major one. Typical is the effect on the diecasting industry.

A review of the contracts, the testimony of the automobile company representatives before this committee last November, available statistics, and ordinary commonsense add up to the compelling conclusion that present legislation is not adequate to present unfair and discriminatory practices that are hurting, and may decimate, the custom diecasting industry by destroying its ability to compete.

Diecastings are made of aluminum casting alloys which must conform in chemical composition to standard specifications. These alloys may be of primary or secondary origin and are purchased from producers or smelters of aluminum.

About 70 percent of the industry's requirements have been purchased from smelters, the balance from primary producers. The majority is purchased in ingot form, although the purchasing of pig has been increasing.

The hot-metal contracts cover primary aluminum casting alloys. In the Ford contract dated November 7, 1955, there is a list of three specifications. The second of these has a chemical composition which is the same as that of ASTM alloy S12A a standard diecasting alloy, commercially known as A13 in ingot form, and as 2312 in pig form.

The particular composition is the one used in the contract as the hypothetical example for price determination.

Using the current list price for 99-plus aluminum pig of 26 cents, and the current AMM quoted price for silicon of 22 cents, the price formula yields a net price per pound of 22.63 cents. This is the price at which Reynolds sells Ford a pound of primary aluminum casting alloy with the chemical composition of alloy A13, in molten form.

Aluminum casting alloy of like quality and grade is priced by Reynolds to the small diecaster at 30.20 cents per pound, in ingot form.

Aluminum casting alloy of the same composition in pig form is priced at 26.50 cents per pound.

The custom diecaster's ability to compete is obviously lessened by the premium he must pay for his basic raw material—a burden of 17½ to 33⅓ percent.

Since the commodity involved is primary aluminum casting alloy of like quality and grade, the only legal basis for the price differences must be a difference in cost. The difference in price charged by Reynolds for ingoting molten alloy is 6¾ cents per pound after allowed freight cost. The difference in price charged to pig the molten alloy is 3.87 cents per pound, or after allowed freight cost, 3.11 cents.

Incidentally, at the November hearings, both General Motors' and Ford's representatives referred to the price of cold alloy pig as 26 cents, and the deduction in price for hot metal was referred to as 2.52 cents per pound. Since neither 2.52 cents nor 3.11 cents nor 6¾ cents per pound represents the actual savings or cost reduction to Reynolds, the price discriminates against the custom diecaster.

On the other hand, if 26 cents is the price that General Motors or Ford pays for the metal they take in pig form, then they are buying at one-half cent less than the published price for comparable pig. Since in this case there are no confusing thermos bottles or complex freight-rate distinctions, we are at a loss to understand the reason for this one-half cent per pounnd reduction.

The question may be raised as to the price of the molten primary casting alloy and the price of secondary casting alloy ingot. AMM quotes smelters alloy of this same composition at 24.50 cents to 25.50 cents per pound.

There are other alloys and different computations would apply. But if the small die caster can today buy standard alloy ingot below the hot metal price, it is a temporary situation, and only happens to be true because the automobile industry miscalculated its market. If production was at the rate of their original 1958 forecast of 6½ million cars the price would not be lower.

But more important is the fact that these contracts were initiated when secondary was selling above primary and it was the hope that a far greater advantage would accrue to Ford and General Motors. Right now the fact that they may be paying a premium must be causing them some discomfort. However, since they realize additional savings because they do not need to melt the hot metal, they won't endanger their earnings.

We have hope that this committee will find a way to end these discriminatory price practices and reestablish the die caster's ability to compete with the automobile manufacturer's captive facility.

Paying a premium for our raw material, we cannot do so. The entire price structure for automotive aluminum die castings is already damaged and the situation serious. With fair competition restored, we repeat our belief in the future.

We believe that aluminum die casting production will double within 5 years and treble within 10 years if the custom die caster survives to spur developments. In view of what has happened since 1946 and in the light of the expressed intentions of the automobile industry, we have some justifiable fears.

In the period from 1946 through 1951, custom die casting sales totaled 563 million pounds, and captive production was 102 million.

In the period from 1952 through 1957, custom die casting sales were 1,280 million pounds and captive output 480 million.

Thus, in the 1946–51 period, 5½ pounds of die castings were custom produced to each pound of captive output. In the 1952–57 period, this was more than cut in half to 2.67 to 1.

These figures are for all aluminum die castings, not only automotive, but it is not by happenstance that this change in ratio coincides with the timing of the hot metal contracts. The Jones Mill aluminum casting plant—the first hot metal operation—was constructed in 1952 and put in production in 1953. This was told to the committee by Mr. Cronin of General Motors in November.

At that time, Mr. Cronin also presented data relating to General Motors' use of aluminum per automobile and the pounds purchased from vendors as opposed to the pounds made in their captive facilities. In 1951 the figures were 7.37 pounds purchased and 4.51 pounds made. In 1952, 7.10 pounds purchased and 4.32 pounds made. In

1953, 7.50 pounds purchased to 7.74 pounds made—this was the year Jones Mill was in production. In 1954 they bought 13.17 pounds and made 7.35. This was the year in which the custom die casters really developed the transmission business. In 1955 the figures were 15.44 purchased to 7.35 made. This was before General Motors transmission die casting expansion, and also the year the auto industry guessed too low. But in 1956 when car production dropped 26 percent from 7.9 million to 5.8 million cars, General Motors bought 14.57 pounds of aluminum and made 13.42 pounds per car.

In other words, car production dropped 26 percent—aluminum use per car went up 5.2 pounds, but their purchases of fabrications dropped eight-tenths of a pound per car while their captive production increased 6.07 pounds. These figures are for all aluminum fabrications in an average General Motors car, not only castings or diecastings.

But the jump in 1953 when Jones Mill was first at production level is again a remarkable coincidence. And the 1955–56 increase in captive fabrications stands in eloquent contrast to the sincere hope expressed for their vendors.

The incentive to develop new applications for automotive diecastings is not strengthened when the purchaser, after a year, confronts you with his plans to make it himself now that you proved it can be done. When it is coupled with his own captive cost computed on the basis of an inside and favorable price for aluminum, it is devastating.

But this is only part of the pressure put on a loyal vendor. We note in the transcript of the hearings that General Motors agreed to buy at Massena a quantity of aluminum sufficient to make one-half of the transmission castings needed for total Chevrolet production. This much metal must be purchased whether the transmission diecastings are made at Massena or not. Purchase orders for transmission diecastings from custom diecasters differ somewhat. They are based on an estimated percentage of estimated purchasing requirements. Note: Not production requirements but purchasing requirements.

In other words, if General Motors sales drop, they may make all they need and have no purchase requirements. You just can't get an order for a definite quantity—or definite share of production needs. That apparently is reserved for Reynolds and hot metal contracts.

Ford Motor Co. in their testimony expressed their plans to use more aluminum per car. In addition to the advantages of assured supply and the lower price which would accrue to them from the hot metal contracts—and at the time supply was short and secondary selling above primary—the following reasons were advanced:

(*a*) They believed the diecasting industry would stay at, or near, capacity and were unsure that it could meet the automobile industry's needs.

(*b*) They felt that the secondary metal supply would be insufficient to meet their projected needs.

(*c*) That their hot metal contract stabilized the secondary market.

(*d*) That as a result the market broke.

(*e*) That they intend to continue to buy secondary aluminum casting alloy from the smelters.

(*f*) That they intend to operate their captive casting plants to the extent of their contractual obligations under the molten metal contracts.

(*g*) That they intend to continue to buy diecastings from their outside vendors with perhaps some "temporary dislocations."

We have not yet been able to determine how the custom diecasting industry will remain at capacity if its principal customer industry produces its requirements in captive plants; or how the supply of secondary is relieved by Ford continuing to buy secondary; or how they intend to continue to buy diecastings from outside vendors while operating their captive facilities up to the extent of their molten metal contractual obligations.

We feel certain, however, that just as a stabilizing effort causes a wide break in price, these mysteries will become clear. It looks as though we will have plenty of time to figure it out while we are temporarily dislocated.

We think that Ford and General Motors freed themselves from the need to purchase metal competitively and in free and open markets. We think Reynolds freed itself from having to sell its aluminum in equitable competition with other producers. And we think it was done through a devious and elaborately contrived arrangement which is no more and no less than out-and-out price cutting on a discriminatory basis.

In exposing these contracts to the light and in examining their import on the future of the aluminum industry and their impact on small businesses such as smelters, diecasters, and other fabricators of aluminum, who supply the automobile industry, this committee is furthering the intent of the Congress to assist small business. We urge the committee to take such steps as are necessary to determine whether the price discriminations manifest in these contracts are proper.

We urge the committee to recommend legislation adequate to prevent the smothering of the ability of small business to compete equitably by preventing both unfair price concessions and raw material supply manipulations.

Thank you.

Mr. YATES. Thank you, Mr. Laine, for your strong statement.

I think we should now, before having questions from the committee, adjourn for lunch and come back at 1:30 p. m. We will reconvene at 1:30 p. m.

(Whereupon, at 11:55 a. m., the subcommittee recessed, to reconvene at 1:30 p. m., of the same day.)

AFTERNOON SESSION

Mr. YATES. The committee will come to order.

TESTIMONY OF DAVID LAINE, EXECUTIVE SECRETARY, AMERICAN DIECASTING INSTITUTE; ACCOMPANIED BY R. E. KELLER, PROGRAMS COORDINATOR—Resumed

Mr. YATES. Mr. Laine, how many members does your organization have?

Mr. LAINE. 125 companies.

Mr. YATES. 125.

Mr. LAINE. 125.

Mr. YATES. Can any distinction be made of your membership in terms of large or small, large and small members?

Mr. LAINE. Yes, sir.

Mr. YATES. Can you give us that breakdown?

Mr. LAINE. Some of our member companies do not die-cast aluminum; 108 of our members die-cast aluminum. I have broken down those 108 companies from the standpoint of employees. Ten of our member companies have more than 250 employees, that is 10 of the 108; 98 have less than 250. Of the 98, 12 have over 100 employees and the remaining 86 companies employ less than 100 people.

Mr. YATES. Are all diecasters members of your association?

Mr. LAINE. No, sir. The American Diecasting Institute is a trade association, first, of custom producers of diecastings only. Captive facilities were not eligible for membership, we do not believe that a community of interest exists.

Mr. YATES. Is there another organization of diecasters?

Mr. LAINE. Not as a trade association.

Mr. YATES. What kind of an organization is it?

Mr. LAINE. There is an engineering group known as the Society for Die Casting Engineers.

Mr. YATES. And how big is their membership?

Mr. LAINE. I do not know.

Mr. YATES. Do you know what organizations belong to that society?

Mr. LAINE. Well, they are mostly captive producers of diecastings and suppliers of metal, suppliers of die steels, and other materials or machinery to the die-casting industry.

Mr. YATES. Is there any overlapping membership? Are any members of the society members of your organization?

Mr. LAINE. Some of them are. Generally, their aims are technical, solely technical, whereas our aims cover the usual activities of a trade association. Their memberships are generally on an individual basis, although they do have some provisions for company memberships.

The American Diecasting Institute has been in existence since 1928 as a typical trade association with technical committees and other such activities.

Mr. YATES. Mr. Sheehan.

Mr. SHEEHAN. Mr. Laine, in response to Mr. Yates' question, you gave the number of members in your association and you stated that there were a certain number with over 250 employees. I noticed in your statement here you have rather strong views about the flagrant discriminations in prices.

Mr. LAINE. Yes. sir.

Mr. SHEEHAN. They are rather hard words and pretty strong, and sometimes I like to see those backed up with facts.

Now, how many members of your association die-cast for the automotive business, in terms of similar diecasting as Reynolds is now doing with General Motors?

Mr. LAINE. Well, Reynolds is not diecasting.

Mr. SHEEHAN. They are selling the metal to them.

Mr. LAINE. I imagine there must be 30 to 35 who supply diecastings regularly to the automotive industry, and about 20 who make castings of the general type that are involved here.

Mr. SHEEHAN. Are any of the other primary aluminum producers members of your association?

Mr. LAINE. What is that, sir?

Mr. SHEEHAN. Do any of the Big Three or any other members of the original aluminum makers, such as Alcoa, have any membership in your group?

Mr. LAINE. Yes, sir. The diecasting division of the Aluminum Company is a member of the Die Casting Institute. Aluminum Company of America is the only primary producer operating a diecasting division on a job-shop or custom-producing basis.

Mr. SHEEHAN. About how much of the automobile castings do they furnish, the Aluminum Company of America, for the automobile industry?

Mr. LAINE. I do not think that I can give you any individual company statistical data broken down that way.

Mr. SHEEHAN. What I am trying to find out is your association naturally is concerned with the automobile companies taking away business, and I am just wondering what the status is in competition between Reynolds, who as you state, apparently has a favorable contract and with the members of your organization.

Mr. LAINE. Reynolds has no contract with members of our association in this connection.

Mr. YATES. I think we had better have that question repeated.

Will you repeat Mr. Sheehan's question.

(Question read.)

Mr. SHEEHAN. We will change that to, Reynolds has a favorable contract with the automobile people in supplying them the molten metal, which apparently in my estimation will put, as you state it, some of your members out of business?

Mr. LAINE. Yes, sir.

Mr. SHEEHAN. What I want to find out is how much of a part the product of Reynolds' direct competitors has to bear on your total membership, only insofar as it applies to the automobile industry?

Mr. LAINE. Well, Alcoa's total percentage of the diecasting business is probably 5 or 6 percent. Their automotive business is some fraction of that, it might be half of it, I don't exactly know. But Alcoa's diecasting division is not the largest diecaster in the United States.

Mr. SHEEHAN. That is what I am trying to find out. Who is?

Mr. LAINE. The largest would be the Doehler Jarvis division of the National Lead Co.

Mr. SHEEHAN. That is small business, is it?

Mr. LAINE. No; we have 50 companies who are not small business, as I pointed out, from our definition of over 210 employees.

Mr. SHEEHAN. Who are the top diecasters with reference to supplying the automobile industry, you named 1, this division of National Lead, who are the next 2 or 3, do you have any idea?

Mr. LAINE. You mean the aluminum castings only?

Mr. SHEEHAN. Yes, only aluminum we are talking about.

The CHAIRMAN. I didn't understand his answer to Doehler Jarvis to apply to being a large diecaster for the automobile industry.

Mr. LAINE. They are very large in sales of automotive diecastings.

Mr. SHEEHAN. They are a subsidiary of National Lead Co.?

Mr. LAINE. I don't have those figures, but from memory I think that Precision Castings in Fayetteville, N. Y.——

Mr. SHEEHAN. Is that an independently owned company?

Mr. LAINE. Recently they were merged into Harsco Corp.

The CHAIRMAN. Is this one of the big companies in your association?

Mr. LAINE. Well, when a company is merged into a large corporation, I can't any longer go by their diecasting employees.

The CHAIRMAN. I should know much more about this business than I do, but I don't even know if Harsco is a big corporation.

Mr. LAINE. Harsco is a large corporation. They are primarily in the steel business and products of that kind.

The CHAIRMAN. When was the merger?

Mr. LAINE. About 2 years ago.

Let me see if I can find some information on that.

The next largest aluminum producer would be Alcoa's division, then there would be Accurate Die Casting Co. of Cleveland, Mount Vernon Die Casting Co., the Die Casting division of Hoover, Parker White Metal Co. in Erie, Pa.

Mr. SHEEHAN. That is enough for my particular purposes. Now, can you identify whether these are all wholly owned companies or are they subsidiaries and affiliated with other corporations?

Mr. LAINE. Of the 10 largest custom diecasters, 4 are divisions of the larger companies.

Mr. SHEEHAN. The reason I asked that, information has been given to me—and I am not vouching for its accuracy, I am merely trying to find out—but I have been told in the custom diecasting business, 3 of the companies do 70 percent of the business.

Mr. LAINE. Three companies do 70 percent of the business?

Mr. SHEEHAN. That was with reference to automotive work?

Mr. LAINE. The 10 largest custom diecasters as a total do 43.7 percent of all custom diecasting business. I cannot bring that down as to what percentage they do of automotive, but I do not believe that it will total 75 percent.

Mr. SHEEHAN. I am not vouching for the accuracy of this. The reason I question it, I wanted to see what the facts are.

These 10 that you are talking about that do 43 percent of the business, are they included in that total of of 125 that you talked about before?

Mr. LAINE. Yes, they are included in the 125, and in the 108.

Mr. SHEEHAN. In other words, roughly less than 10 percent of the companies do about half of the business?

Mr. LAINE. 10 percent of the companies do 43 percent of the total business.

The CHAIRMAN. With the automobile division?

Mr. LAINE. Automobile included, I can't give you the exact—actually, in some of those companies, at least, the pattern of diversity of production is more widespread than in some of the smaller companies who have a higher percentage of the automotive.

Mr. SHEEHAN. You were here this morning, as I remember, and you heard Mr. Davis when we questioned him as to whether or not in 1965 there might be a shortage of aluminum in the industry. I notice in your statement you think that within 5 years there will be a matter of urgency for aluminum supply, is that right?

Mr. LAINE. That is my belief.

Mr. SHEEHAN. I notice in the figures you gave on page 10 and 11, and I am only trying to get them in the proper focus, if you want to refer to them, you point out that in the years 1946 to 1951 the custom diecasting did 563 million pounds, and the captive production was 102 million pounds?

Mr. LAINE. Yes, sir.

Mr. SHEEHAN. At that point, the captive production amounted to 16 percent of the total production. Then in the figures you give from 1952 to 1957, you show that 1,280 million pounds were done by the custom diecasters, and 480 million pounds by the captive producers, which now shows that the captive producers are doing approximately 27 percent of the business, or an increase of from 16 to 27 percent which is a sizable increase. However, in all fairness to the figures, I note that you make reference to the fact that "it looks as though we will have plenty of time to figure out why we are temporarily dislocated", but by the same token, the members, your own members, your own group, increased their total tonnage over 50 percent in that period of time. So apparently they are not going out of business, are they?

Mr. LAINE. We can say that our business doubled.

Mr. SHEEHAN. You went from 563 million to 1.2 billion——

Mr. LAINE. That is a 100 percent increase.

That is a 300 percent increase on the part of the captive production. And that took place with only the start of the flow of molten metal. These contracts, if you will recall Ford testified somewhere in these transcripts that they expect to receive 18 million pounds in 1958. The contract calls for 64 million pounds. I presume that by 1959 they will be receiving full deliveries. Our question is this: We are losing business every day as they manufacture these castings in captive facilities, and as more and more of these facilities are put into play, in spite of increases in the use of aluminum diecastings in automobiles, we are going to make a smaller and smaller portion of the requirements for what is now our principal customer, to the point where we may make none.

Mr. SHEEHAN. That is true. But by the same token, in spite of the fact that they have increased from 102 million pounds to 480 million pounds, your members have also doubled their particular capacity, so I am just questioning the impression which might be left that because the automobile people are going to do this, that you people are going to go out of business. Do you mean to say that by 1965, within 5 years, they are going to have to double the production in order to keep everybody in business?

Mr. LAINE. I believe that we can compete, and we are not worried about captive production. We will take our chances. We cannot compete if we must pay from 17 to 33⅓ percent more for the raw material. I do not believe that Ford or General Motors will operate facilities if it involves them in higher costs. And so long as they have a protection in the form of a lower raw material price, we cannot ever prove to them that their costs are out of line.

If we could bid metal at the same cost as they buy it, we could buy on their work against the captive facilities and sell our product.

Mr. SHEEHAN. Well, couldn't some members of your association—and I am sure if the aluminum companies did not agree to it, it would be that a violation of the Robinson-Patman Act by not giving equal customers equal prices—couldn't a group of your companies get together, or one of your companies, build a facility right next to the aluminum company and buy the molten metal?

Mr. LAINE. No, sir.

Mr. SHEEHAN. Why not?

Mr. LAINE. We have no assurance of receiving orders.

Mr. SHEEHAN. You could go to one of the automobile companies and make a contract to deliver these die casts at a certain price.

Mr. LAINE. You cannot get an order of that kind.

Mr. SHEEHAN. Why not?

Mr. LAINE. When you bid to an automobile company, they tell you what their estimated production requirements—estimated purchase requirements will be, not production requirements. And they ask you to bid on a daily delivery rate for all or part of the estimated purchase requirements. After you negotiate a price for the castings on that basis, you receive from them a contract that has no specified number of castings, but depends on monthly releases. On the 25th of the month you normally get the release for the following month. And you do not know until the 25th of a given month what you will have to make the next month. It can be zero, as it is in some cases today, or it can be full daily requirements that you bid on, or 25 percent more than that. And you have no way of knowing it. We do not control production of automobiles, nor can we get an order that guarantees that we may supply so many per day or so many per month or so many per year. We are required to bid on the business of supplying only what they release for the given month, and month to month.

Mr. SHEEHAN. Then it would seem to me that none of your companies would want any type of contract like that, because they don't know where they are from month to month; it would be better that the automobile companies should risk that problem.

Mr. LAINE. The automobile companies will not risk it. We take the risk. And the fact of the matter is that, so far as this particular issue, which is one of molten metal, goes, as you recall, you are required to take deliveries either 7 days a week or 5 days a week. We would either be buried in molten metal or we would have to take it in pig, and we would have more pig than the producer before we get done.

Mr. SHEEHAN. And, therefore, the automobile companies are now taking that risk, and they have to get rid of that molten metal regardless of what happens to it?

Mr. LAINE. They are not necessarily taking a risk, because all they have to do is cut down on what they get from outside vendors. In addition to which the contract, the Massena contract, provides that if Chevrolet production schedules drop, they don't have to take more metal than half the production contracts.

Mr. SHEEHAN. I can't argue the logic of that. We know in defense contracts, and Government contracts, subcontractors get a lot of business from big companies and can't do it, and they just take it onto themselves.

Mr. LAINE. But the point here is a price factor, and the question of putting up a facility adjacent to an aluminum plant, in order to be able to supply our principal customer, which is the automobile industry. And we obviously cannot get orders that would permit that, we are not in control of it. There are only three companies who are big enough to take such a deal, and that is General Motors, Chrysler, and Ford.

Mr. SHEEHAN. So I can only make one observation at this point. I assume you have been in business for yourself someplace along the line, and I know that you are old enough and smart enough to know what has happened in America, and as a businessman you would review the steel industry or the automotive industry, and you know that it has been a continuous, throughout the years, a continuous integration process. Briggs body used to be seperate from Chrysler, Fisher body, and we could get right down the line. And the history has been that where the automotive companies can make savings, they take these functions unto themselves in most cases. And your business will—I won't say suffer—but I think will eventually be in the same position, where if they can manufacture it better or cheaper they are going to take the company over or put up their own facilities.

Mr. LAINE. We recognize that. And if that was not tied to a discriminatory price on raw material we would not be here today. The fact that they can buy their metal at a price that we cannot buy it is a matter of concern that brings us here.

We believe those contracts provide discriminatory prices for the same material that they sell us.

Mr. SHEEHAN. Well, then, I assume that your association should notify the Justice Department and inform them what you know about discrimination, and let them judge so the citizens can determine whether it is discrimination or not.

Mr. LAINE. Well, we intend to. And we also hope that this committee will take such action.

Mr. SHEEHAN. Except I am afraid we cannot judge discrimination.

Mr. LAINE. I mean notify the Attorney General.

Mr. SHEEHAN. In that case, yes. Notify him to look into it?

Mr. LAINE. Yes, that is correct. We will be able to prove our position.

Mr. YATES. Mr. Riehlman.

Mr. RIEHLMAN. No questions.

Mr. YATES. In response to Mr. Sheehan's question, I gather the impression that it was being suggested that if you could not do business with the automotive industry, because it might be termed a normal attrition process in American industrial development, and in view of the fact that you have the opinion that the demand for aluminum will be tremendously increased within the next 5 years, what other industries can you go into as diecasters?

Mr. LAINE. We tied our belief to the increase on the fact that we would be able to sell the automobile industry, and that we would be selling them things that they are not now able to make for themselves in increasing numbers.

Mr. YATES. What other industries do you serve?

Mr. LAINE. The appliance industry, the agricultural machinery industry, business machines, commercial equipment, plumbing——

Mr. YATES. Are there any captive plants in any of the other industries?

Mr. LAINE. There are some captive plants in some of the other industries, but those captive plants are buying pig or ingot on the same basis as we are, and we are not worried about those captive plants. These are the only captive plants that have a favorable raw material price, the automotive plants.

Mr. YATES. Are any of the other industries than automotive that you have mentioned as large consumers of aluminum as the automotive industry?

Mr. LAINE. No, sir.

Mr. YATES. Which is the next largest industry?

Mr. LAINE. The appliance industry, home appliances.

Mr. YATES. Is it possible that any of the companies in the appliance industry are large enough to be interested in the hot metal contracts?

Mr. LAINE. I do not believe so, because of the nature of the application, as well as the fact that the appliance business is not equally concentrated to the automobile business. In other words, while there are major appliance companies, big ones, there are more big ones, and there are many more companies involved, also the type of use, the type of part that is made is of lesser weight than is true in automotive—I mean, an automotive transmission casting cover can weigh from 10 to 19 pounds. I do not know of any aluminum application in the appliance field that is anywhere near that weight.

Mr. YATES. When we discussed aluminum for the automotive industry, do we include the Kelvinator division of Nash, for example, that makes the refrigerators, do we include the Frigidaire, or are they limiting it to automobiles?

Mr. LAINE. We include them under home appliances. We receive reports from our members of shipments according to end uses taken from the standard industrial classification manual of the Government, and appliances and automotive are separate classifications.

Mr. YATES. The automotive companies are in the appliance business now, aren't they? Isn't it possible that the hot-metal contracts will be used for castings, for the appliance field too?

Mr. LAINE. If they have to use up their metal, it is possible, but I believe that their aim here is transmission castings, the Massena operation is referred to as a Chevrolet transmission division, certainly the Lister Hill development is primarily for transmission castings, they are mainly for their automotive divisions. I think that was brought out in the earlier testimony.

Mr. YATES. Well, that is today. It is possible that tomorrow they may want to expand.

Mr. LAINE. It is certainly possible. It is also possible that if a favorable price prevails, and you can make deals of this kind, that some of the other large buyers of die castings might try and find how they can get into this kind of a deal too. That is precisely what we are talking about.

Mr. YATES. Have you tried to buy hot metal from the Reynolds Co.?

Mr. LAINE. No, I don't believe any die caster has tried to buy hot metal. I am not sure, there may be one that did try, but I don't believe so, because it calls for a facility near the smelting plant, and

that requires an assured production rate of a given type of production, and no die caster is in a position to assure that, so they could not buy it on the same kind of a basis. Their business is diversified, they have to supply other customers, to put up a special purpose plant and take the kind of metal deliveries per day that are required, they would have to have assurance of orders that could justify such a plant, and nobody but the automobile companies can be assured of that. They will not buy from us on a basis that assures that to us.

Mr. YATES. Why do you term this a discriminatory price? When the companies were in before us, they said they sold at a public price, now, do you consider this a deviation from the public price?

Mr. LAINE. A devious deviation.

This is allegedly a new product, but it has been denied by at least three other primary producers, who stated that was not a new product, it is the same molten aluminum, the same aluminum, but in a different form.

The kind of confusion that comes up is that the pricing formula refers to 99-plus pig. This is aluminum. That is in the pricing formula only. The metal that is delivered is known as producers alloy. That is a different product.

Now, you can buy primary aluminum in the form of pig or in the form of ingot. And, although there is no contract for it, presumably you could even buy molten primary aluminum. Producers alloys are sold in the form of pig, in the form of ingot, and to two companies in molten form. But the products as separate commodities would be aluminum and aluminum alloy.

Mr. YATES. Is aluminum alloy a more expensive product than aluminum pig?

Mr. LAINE. Yes, sir.

Mr. YATES. Then insofar as the Government's contracts with the company are concerned, the Government pays a published price for aluminum. Insofar as the company delivers an alloy rather than an aluminum, a type of aluminum, is it your contention that there is a greater discount to Ford and General Motors than the Government receives, a greater discount so that the price is lower to these companies than the Government?

Mr. LAINE. No; the Government does not buy producers alloy. The Government is buying aluminum. This contract covers the sale of alloy, producers alloy.

The confusion here is, if you will recall the pricing provisions, the terms of the contract provide that they will take molten aluminum casting alloy, or take it in pig form if they cannot accept it in the molten form. And the price for the pig should be the published price.

Yet both General Motors and Ford referred to that price as 26 cents, which is not the price quoted for the producers alloy. The price should be 26.5 cents.

Mr. YATES. The price should be 26.5 cents for producers alloy?

Mr. LAINE. That is correct. If you have an American Metal Market there, you can see what I am talking about.

Mr. YATES. Mr. Dalmas.

Mr. DALMAS. I just want to ask Mr. Laine what the number of the alloy is that you call producers alloy?

Mr. LAINE. Well, producers alloys come in a whole series of mixtures. American Metal Market lists producers alloys in 3 forms of pig: 2312, A2312, and EC grade, and in ingot form——

Mr. DALMAS. 2312 contains 12 percent of silicon and something else?

Mr. LAINE. About six-tenths copper.

Mr. DALMAS. I beg your pardon.

Mr. LAINE. Five- or six-tenths copper. And that pig is the same as A13 ingot.

Mr. DALMAS. The price I am looking at is 26.2 cents per pound.

Mr. LAINE. That is A2312. The specification of 2312, which is quoted at 26.5 is what I am looking at. And that is the same as 13, which is 2312 in ingot form, which is what the diecaster would buy.

And that same alloy is quoted as a secondary, a smelters alloy, and the smelters alloys, 43 and 13 alloy, with a 60 copper maximum, is shown as 24.5 to 25.5 cents.

This American Metal Market I have is February 19, but I do not believe there has been any change in the prices.

Mr. DALMAS. You said, though, that the diecasters, just to keep the record straight, as between the primaries and the secondaries, that the diecasters ordinarily bought approximately 70 percent of their requirements from the second producers.

Mr. LAINE. That is right. Not all of our needs are any one alloy, but if we could buy primary alloy, if any of the primary companies would like to sell us at 22.6, I am sure they can get all the business they would like from us.

Mr. DALMAS. Mr. Chairman, just one other thing.

Mr. Laine indicates that in this particular contract for hot metal the price is based on the metal including the alloy, the higher priced metal. As I recall, it was testified to last fall, I do not know the page number, so I cannot give it to you exactly, that the price was based on the metal plus an additional charge for the alloy.

Mr. LAINE. Mr. Dalmas, perhaps I could clarify that. The commodity aluminum casting alloy of varying specifications is covered by this contract. The price is determined by a formula. In this formula the first thing is the list price of 99-plus pig. From this they can deduct a freight factor.

Mr. DALMAS. That is 26 cents.

Mr. LAINE. That is correct. They then deduct a freight factor. And I would not read the page on what the freight factor is, but it is undevious.

Mr. DALMAS. It is what?

Mr. LAINE. It is very simple.

Mr. YATES. He said it is not devious.

Mr. LAINE. It is undevious: It is very complex and very complicated.

They then deduct 10 percent after they have taken the freight factor out of the price of 99-plus pig.

Then they take the percentage of aluminum in the alloy. In other words, if it is 88 percent aluminum or 89 percent aluminum, they take that remaining factor times 89 to determine the aluminum content of the alloy.

Then they add the 11 to 13 percent of alloy to arrive at the price for the commodity known as casting alloy.

Mr. DALMAS. Is not that what I said?

Mr. LAINE. Well, I think that you talked about the price of primary aluminum, but primary aluminum only enters in here to that extent.

Mr. DALMAS. In other words, the base price is 26 cents. You deduct the freight factor; you deduct 10 percent; and then you add another increment for the alloy.

Mr. LAINE. Yes.

Mr. YATES. The difference between this formula and the formula that is used for Government purchases is that in the case of Government purchases, no silicon or other alloy is added, is that correct?

Mr. LAINE. That is right. Therefore, there is no formula needed. All they have is a published price. And if this were a fourth commodity, if that is what they are talking about, or a new commodity in the aluminum field, we would see no reason that there would not be a published price, and it be available, as are all other aluminum products, to all purchasers and users of it.

But this is not done that way.

Mr. YATES. What do you pay for this 2312 alloy when you buy it from a smelter in the secondary metal?

Mr. LAINE. Well, 2312 is a producer's alloy pig number. The smelters do not quote on that in pig form, but in ingot form you would have to pay 24.5 to 25.5 cents. Now, in ingot form, if you buy it from a producer, it is 30.20 cents.

Mr. YATES. Why is it more?

Mr. LAINE. I think maybe Reynolds Metal Co. ought to answer that question. I only know one thing, and that is that historically, except for exceptional periods, smelters' alloys will be below the price of the comparable primary alloy, because they——

Mr. YATES. Does it have the same chemical content?

Mr. LAINE. It has the identical content, it must have the identical content to meet ASTM and SAE specifications, it must meet standard specifications, either issued by the American Society for Testing Materials or the Society of Automotive Engineers or some other recognized standards agency.

Mr. YATES. Then why does not the public in general that needs this type of metal just buy it from the smelters rather than the primary producers?

Mr. LAINE. My friend Mr. Burton will answer that one.

Mr. YATES. Well, it seems to me, knowing as little as I do about this business, that it would be obvious that people would just go to the smelters rather than buy it from the primary producers. Does it not seem that way to you?

Mr. LAINE. Well, we do buy as much as we can from the smelters, and for precisely these reasons.

But the question of discrimination is this: If a specification calls for primary alloy, and there are specifications that do, we would have to buy primary. If we try to buy that primary, we must pay 30.20 cents in ingot form.

Mr. SHEEHAN. Mr. Laine, with reference to your statement on page 9, the bottom of page 9, take a look at that, wherein you say:

> But if the small diecaster can today buy standard alloy ingot below the hot-metal price, it is a temporary situation and only happens to be true because the automobile industry miscalculated its market.

In other words, I gather from that that the automotive people are paying more than they should pay as of the present time, is that not right?

Mr. LAINE. I think at the present moment it is costing them more than they could buy a standard alloy, not the identical alloy. You see, the point I am getting at is that I used A13, because A13 alloy happens to be one in this contract used for pricing purposes, and in order not to construct a price on an alloy that was not listed, I used the identical example that is in here. That is not the most used diecasting alloy. It just happens to be the one quoted in the contract. There are other alloys, and different computations would be necessary.

But I wanted to refer specifically to the one that is so elaborately set forth in the contract. And it happened that that composition is a diecasting alloy.

Mr. SHEEHAN. In other words, the automobile companies sometimes make mistakes?

Mr. LAINE. They are not infallible.

Mr. SHEEHAN. The only reason I bring that in, it seems to me—and I was just wondering what your opinion is—there must be other advantages to this hot molten metal contract other than price, but everybody seems to be emphasizing price.

Mr. LAINE. Mr. Sheehan, I can assure you that the only reason that anybody goes into the diecasting business or signs a hot-metal contract is because he can make it cheaper or make a price advantage. That is a legitimate aim of American business, and where it is followed legitimately, we have no objection to it.

Mr. SHEEHAN. Well, I do not quite fully agree with you. I have been buying merchandise for a number of years, and I will admit I have bought merchandise from one supplier and paid more for it than I could buy it from another, because things enter into it—the reputation of the company, the fact that they may take back damaged merchandise, they have treated you fairly over a long period of time—and price is not the only consideration.

Mr. LAINE. But the price that they sell you that merchandise is the same price that they offer the people in competition with you.

Mr. SHEEHAN. There must be other advantages than just price.

Mr. LAINE. The advantage is a lower cost of manufacture, that is price.

Mr. SHEEHAN. That is a different matter. In other words, what you are saying, they are going to be able to manufacture cheaper with their own facilities than they can by contracting it, forgetting about the difference in price?

Mr. LAINE. If they paid the same price for metal, in spite of the fact that they save some melting costs, we could compete with them. But since they pay less for the material, we cannot overcome that kind of a difference. It is the identical material.

Mr. SHEEHAN. However, you have just said that they will make other savings.

Mr. LAINE. They will make other savings. We can offset those other savings, but the whole point is that we cannot offset the difference in raw material. That is absolutely impossible. We can offset the savings that they can make in melting. That is our business. Tech-

nologically, we are the leaders in the field, and that is our business. As job shop producers, we have to keep ahead of all the needs of our customers, and we do this. But we cannot compete with a raw material disadvantage; this we cannot handle.

Mr. SHEEHAN. There must be some equity in it.

Mr. LAINE. That is right.

Mr. SHEEHAN. That is all.

Mr. YATES. Alloy No. 2312, is that only a producers alloy, or can that be a primary alloy, too?

Mr. LAINE. It could be. This particular 2312 number refers—it is in the table of producers alloys, that is the number that they put on it.

I believe that the smelter could produce 50-pound pig to that composition. And Mr. Burton might be able to answer that. What their price would be, I do not know, because they do not normally quote on that.

Mr. YATES. Under what circumstances would you want a primary alloy rather than a producers alloy?

Mr. LAINE. Well, the primary is a producers alloy. The times you would want producers alloy or primary is where a specification calls for it.

Mr. YATES. I know. But you stated a few moments ago that you used 70 percent producers alloy——

Mr. LAINE. Smelters.

Mr. YATES. Secondary, and 30 percent from the producers. Why did you say you did not use all from the smelters?

Mr. LAINE. Because we have specifications that call for primary alloys.

Mr. YATES. Primary alloys. And the smelters cannot give you primary alloys?

Mr. LAINE. No, sir. They work from scrap. The composition is the same, but we find that there are requirements that you use primary on certain jobs.

Mr. YATES. Can they use primary scrap?

Mr. LAINE. They start with primary scrap, but that is scrap, that makes it a smelters alloy, that makes it a secondary alloy.

Mr. YATES. Even though it is the same chemical composition as the primary?

Mr. LAINE. Yes. I think it has something to do with intergranular oxides or something I cannot answer.

Mr. YATES. I still do not see where your specification would call for a primary alloy if you get the same ingot from a smelter, if you can get it cheaper.

Mr. LAINE. Most of the specifications permit you to use either a smelters alloy or a producers, either secondary or primary.

Mr. YATES. Apparently 30 percent of them do not.

Mr. LAINE. Some percentage, currently 30 percent.

Mr. YATES. Why is it cheaper to get these smelter alloys, and you get the identical product?

Mr. LAINE. There are prejudices even in engineering and design. I think the representative of the smelting industry will be able to answer the fact that we do not know why there should be some specifications that call for primary. During the war where aircraft func-

tional parts were involved, the Air Force specified primary metal. The specifications themselves as issued by ASTM deal in terms of chemical composition and do not refer to the origin.

Yet you can buy it from a primary producer or a secondary producer, and where it is specified with the letter "A" in the ingot table, it refers to a primary source.

Mr. DALMAS. Mr. Laine, the chairman was asking about the acceptability of secondary metal, and the price differential between a secondary and a primary metal. I would like to ask you this, based on what we have learned here in the previous hearings: It is not true that the price of secondary metal is controlled somewhat, or almost, or absolutely, by the price of scrap and the availability of scrap? In other words, in short supply of scrap, the price of secondary metal goes up, as it did, and it went up in periods of short supply higher than the primary metal?

Mr. LAINE. Right.

Mr. DALMAS. So you do have a variable factor there in the price of secondary metal that you do not have in the price of primary metal?

Mr. LAINE. That is correct.

Mr. DALMAS. Is the supply of secondary metal, generally speaking, as dependable as that of the primary metal?

Mr. LAINE. As far as casting alloy is concerned, we have depended on it. There have been times of shortage, but at those times we could not get primary because primary was short, they are related to each other.

I think Mr. Burton can better answer the questions of the price of secondary metal than I can. We buy it, but we do not make it, and I am not familiar with all of the manufacturing problems that come into it.

Mr. DALMAS. You were talking, too, about the acceptability of secondary metal as compared to primary metal. Now if you take the scrap and manufacture it into secondary metal, the scrap having gone through certain cleaning processes, segregating processes, and so on, alloy for alloy, is not the secondary metal as acceptable as the primary metal?

Mr. LAINE. In our opinion, it is, and should be, if it meets the standard specifications, it should be acceptable.

Mr. DALMAS. There is no factor of impurity involved in the metal, is there? I mean if it is cleaned right and melted right.

Mr. LAINE. In indicated chemical composition, there is no difference.

Mr. DALMAS. Thank you.

Mr. YATES. Mr. Riehlman.

Mr. RIEHLMAN. Mr. Laine, I am rather new on this committee on the aluminum industry. As I recall last fall's hearing and the questions asked of General Motors and Ford Motor Co. representatives, one concern was whether or not this new process would take from the small independent processors or fabricators any of their volume of business, I think the record shows that their statement was something to the effect that they did not anticipate it would affect their volume of business, that in fact their plans to increase the poundage in the automobiles that they intend to manufacture in the years ahead would even increase the independents' production and their opportunities for additional contracts.

Mr. LAINE. Mr. Riehlman, I think you will find that those were hopes rather than flat statements. They hoped that this would be true, they hoped that there would be only temporary dislocation. Meanwhile, they have signed contracts for molten metal, casting alloy, to be used in casting plants. And if they find more uses for aluminum on an automobile, and they make enough automobiles, we are liable to get some of the business. But they have stated that they intend to use their own castings facilities up to the point of their metal contracts, obviously. And we will take what is left over.

The question here is not 1 of gross gain in terms of pounds alone, but 1 of realizable accomplishment or percentage of our potential gain. In other words, if we were supplying 100 percent of the automobile diecasting needs, and we are now supplying 50 percent, it is true that if the market doubles, we would not lose any pounds, but we will be down to 25 percent. And I do not think that American industry builds on the basis of a generally diminishing market potentiality. And when that is tied to one factor only, a lower price for raw material, we are burdened unduly. Our competitive ability is lessened by this, the incentive and the ability to compete is lessened.

Mr. RIEHLMAN. Do you have any specific instances that you could cite to the committee where the industry has up to this point lost contracts?

Mr. LAINE. I think that the statistics that General Motors gave on, I believe, page 28 of the record, indicate the point we are talking about—page 231.

Mr. RIEHLMAN. I am asking about your own group of people that you represent.

Mr. LAINE. Sure. Our deliveries of diecastings to the automobile industry at present are off by a greater amount than car production.

Mr. RIEHLMAN. Can you specifically lay it to this hot-metal contract?

Mr. LAINE. We can lay certain specific cases to it. There are parts being made in the hot-metal plants in quantities which formerly were purchased.

Mr. RIEHLMAN. That is the point about which I was asking.

Mr. LAINE. Definitely. There are transmission castings.

Mr. RIEHLMAN. Give us the specific companies that are affected.

Mr. LAINE. I am sorry. I am not at liberty to give that information. I would have to obtain a release from the companies involved.

Mr. RIEHLMAN. You are just giving us information in general terms, are you not?

Mr. LAINE. Well, statistical evidence is available in Government statistics that shows the relationship between castings produced for sale, diecastings for sale, and diecastings for own use, and the numbers alone show it, because this is not a question that can be determined month by month or year by year, it must be taken over a long period when theses contracts come into play and new facilities are put into operation. But certainly the diecasting industry, the custom diecasters, are delivering a smaller portion of the total market than they were 5 years ago.

Mr. RIEHLMAN. In comparison to the number of cars that were being manufactured?

Mr. LAINE. In comparison to the number of cars. I cite one example here: that in 1956 General Motors—and this was all fabrications, but I think you will find that the greatest content of the aluminum usage is diecastings—in 1956 car production dropped 26 percent from 7.9 million to 5.8 million cars. General Motors bought 14.5 pounds of aluminum fabrications and made 13.4.

Now compared with the previous year, production of cars dropped 26 percent and aluminum use per car went up 5.2 pounds; yet they bought eight-tenths of a pound less per car and made 6 pounds more per car than in the previous year. Whenever there is low-car production, the captive facility is used to turn out the parts; when car production is very high, and their facilities are not sufficient, our volume is at high levels.

Mr. RIEHLMAN. Is that not true in most any type of industry?

Mr. LAINE. We have no quarrel with that, so long as they do not get a lower price of raw material to make their cost look better than we can sell for.

Mr. RIEHLMAN. Counsel is calling my attention here to the fact that the Chrysler Corp. apparently used twice as much aluminum in their manufacture of cars as the other car producers.

Mr. LAINE. Correct.

Mr. RIEHLMAN. And yet they have a large captive plant of their own; is that correct?

Mr. LAINE. No. They have a very small captive aluminum facility, and it is almost new. The Kokomo facility is just starting, it is hardly in production, besides which we are not worried about that particular facility, because they are buying aluminum in pig form, they are not buying molten aluminum.

Mr. RIEHLMAN. You are not apprehensive that the expansion of that plant will affect your industry at all?

Mr. LAINE. We have lived with that situation before. We did not complain when General Motors put in the Bedford facility or Ford's plant in Monroe, Mich., or any plant that uses cold metal, and buys it at the same price we do.

Mr. YATES. Well, is Chrysler buying pig at 26.5 or 26 cents?

Mr. LAINE. I presume they are buying it at 26.5, if it is pig, or whatever price——

Mr. YATES. In other words, the published price?

Mr. LAINE. The published price, or the quoted price, if it is a smelters alloy.

The point here is that here are two facilities put in that are predicated upon a favorable price for raw material. We cannot compete with those facilities. If the difference in price were 3 cents a pound, not 7, on a 19-pound casting, we start out 57 cents higher, and we cannot overcome that whatever we do.

Mr. YATES. How does the scrap market affect your business? Suppose the price of scrap goes up?

Mr. LAINE. If the price of scrap goes up, I presume the price of secondary will increase. If the price of secondary increases, we will be in the same boat as any cold metal plant using the given alloy, whatever it may be.

Mr. YATES. Will this make your position more difficult, in view of the contracts such as the hot metal contract?

Mr. LAINE. It is conceivable that it would, because the favorable price for primary would then be what they hoped it would be at the time they made the contracts, when you recall the price of secondary was some 29 cents. So on that basis we would be much higher, and therefore less able to compete with the hot metal plant.

Mr. YATES. You might find yourself at greater disadvantage.

Mr. LAINE. Against hot metal.

Mr. YATES. Any other questions?

Mr. DALMAS. I just want to ask one question, Mr. Chairman, if I may.

Is the Aluminium Company of Canada a member of the association?

Mr. LAINE. No, sir.

Mr. DALMAS. Thank you.

Mr. YATES. Thank you very much, Mr. Laine, for your statement.

Mr. Sheehan asked me to find out who the officers of your institute were. Do you have any objection to putting their names in the record?

Mr. LAINE. Well, at the present moment, the president of the institute is Mr. Sheehan of the Aluminum Company of America. But I would like to point out one thing. The American Die Casting Institute has a long record of representing the custom die casters. Alcoa's die casting division functions as a die caster. I have no contact, no communications with any other division of the Aluminum Company of America. I deal entirely with the die casting division, and there is no favorable treatment to any member of the institute, including the officers of the institute.

The vice president of the institute at the moment is Mr. C. L. Anthony of the Hoover Co.

Our board of directors is composed of some 18 members, most of whom are from very small companies.

Mr. YATES. Do you have any objection to putting the list of their names in and the companies with which they are affiliated?

Mr. LAINE. I would be glad to enter into the record for the use of the committee—I do not think it has to go in the transcript—the directory of the American Die Casting Institute.

Mr. YATES. Thank you very much. Mr. Burton.

TESTIMONY OF CARL H. BURTON, SECRETARY, ALUMINUM SMELTERS RESEARCH INSTITUTE

Mr. YATES. We will now hear from Mr. Burton of the Aluminum Smelters Research Institute.

Mr. Burton, we are pleased to have you testify.

Do you have a statement at this time?

Mr. BURTON. I do.

Mr. YATES. Will you please proceed.

Mr. BURTON. Mr. Chairman and members of the committee, I am Carl H. Burton, secretary of Aluminum Smelters Research Institute, 20 North Wacker Drive, Chicago, Ill. As has been previously stated in these hearings, ASRI is the trade association of the Aluminum Smelting, or Secondary Aluminum Industry. Its members produce about 80 percent of the total secondary aluminum output of the United States.

Having been a witness in other hearings in this series on aluminum industry, and an interested observer at these sessions in which I did not appear as a witness, I welcome this further opportunity, in response to your chairman's letter of February 6, to discuss certain points which I deem to have been covered too briefly and inconclusively.

It is not my intention to burden the record with repetition of facts already a part thereof, but for the benefit of those members of the subcommittee who have assumed their duties since our last testimony, I feel that I should state that the aluminum smelting industry is made up practically entirely of small-business units, and that the approximately 3,500 foundry and die caster customers served by it are also overwhelmingly in the same category.

Complete figures for the full year are not yet available, but in the first 11 months of 1957 the aluminum smelting industry produced and shipped 545 million pounds of products. Casting alloys shipped by the smelting industry amounted to 473 million pounds, and accounted for 67.5 percent of the 699 million pounds of aluminum castings produced. These casting alloys are sold in direct competition with those of the primary producers, and constitute the major item of smelters' business, whereas casting alloys form but a minor portion of the producers' business to be cultivated intensively by them generally only at such times as their own fabricating plants do not need all the primary metal they produce.

The record of these hearings has been very informative, and I am sure the public has a better understanding as a result thereof. It is my sincere hope that through my participation I may have contributed somewhat to a fuller understanding of the subject. There are, however, as mentioned, certain areas which have been touched upon too lightly. They are of great importance, but have not, in my judgment, been developed in sufficient clarity of detail for a universal understanding of the workings, and the interworkings, of the aluminum industry.

These points are:

(I) Aluminum scrap as a raw material.

(II) The position of dominance held by the primary producers over the secondary industry by virtue of their scrap operations.

(III) Hot metal deals—their full significance and impact.

(I) ALUMINUM SCRAP AS A RAW MATERIAL

As has been testified to previously in these hearings (May 18, 1955, this witness, p. 106), the basic raw material of the aluminum smelting industry is aluminum scrap. It is not primary aluminum.

It is quite possible to have a plethora of aluminum and, at the same time, a shortage of aluminum scrap. Unlike the primary aluminum producers, who generally own and thereby completely control their sources of raw material (bauxite mines), the smelting industry must rely upon the supply of scrap in the open market; scrap which is owned by literally thousands of industrial plants and dealers, and which does not flow at a fixed, or controlled, or controllable rate.

Aluminum scrap is traded in the open market and moves subject to the high bid, and it is therefore normally a fluid market, subject to frequent change governed by the law of supply and demand. Tra-

ditionally, smelters have consumed 70 or more percent of all aluminum market scrap. Appendix A, attached, reflects scrap consumption by users for the years 1950 through 1957. These figures are from the Bureau of Mines, and indicate consumption attributable to the various classes of users, that is, smelters, producers, and others.

(II) THE POSITION OF DOMINANCE HELD BY THE PRIMARY PRODUCERS OVER THE SECONDARY INDUSTRY

It should be recognized that smelters' ingot prices are hemmed in between a ceiling of primary prices and a floor determined by scrap prices.

The very fact that scrap does ordinarily move as above indicated and that it constitutes the basis for smelters' operations, without which the smelting industry cannot exist, provides the leverage through which the smelting industry can be controlled.

Should any one wish to virtually annihilate the smelting industry, he could do so by bidding up the price of scrap to the point that secondary alloys would, perforce, be elevated to prices higher than comparable primary alloys, and remain there as long as the pressure remained on scrap prices.

By this process, smelters' alloys would be completely eliminated as a competitive factor, and the tonnages normally furnished by the smelting industry would then, as a natural consequence, be forced into the hands of the relatively few aluminum producers. Of course, there have been occasions in the past when secondary alloys have sold at prices equal to or above those for primary alloys. These were occasions, however, when there were overall shortages of aluminum, and which were aggravated at times, by export demand for scrap in a market which has never, except in a few rare intervals of very short duration, even appeared to be overadequate in supply.

It must be self-evident that only the primary producers could possibly consume scrap in the sustained large quantities which would be attracted by unrealistic bids. Therefore, it lies largely within their capabilities to determine whether or not the secondary industry shall remain competitive.

The power of life or death over a competitor was long ago recognized as being repugnant to the American free enterprise system, and its existence was prohibited by the enactment of the Federal antitrust laws. The purpose of those laws was to eliminate such positions of power over competitors, and they deem it immaterial whether the power might be exercised benevolently or malevolently. The mere ability to control in any way was considered inimical, and therefore, not to be tolerated.

In these hearings in the past when producers operations in the realm of scrap have been questioned, they have been briefly and perfunctorily passed over by the statement that they have "always bought scrap" (p. 353, Mr. Sheehan and Mr. Rhoades; p. 355, Mr. Wilmot; p. 357, this witness).

What are the reasons which might motivate the producers in purchasing scrap? Well, one could be a shortage of primary metal. Another might be a desire to sustain the price of scrap so that secondary ingot would more closely meet the prices quoted for primary alloys.

Still another might be the wish to force secondary ingot prices to an unnatural point to make any special contracts more palatable to their customers. Yet another might be as a means of extending unannounced price cuts on fabricated shapes by means of conversion deals. In these conversion deals, scrap is accepted by the fabricator as a credit on the purchase of mill products.

The allowance for the scrap may bear no recognizable relationship to the established market price for scrap, but reflects in addition any amount the fabricator may have extended to his customer as a surreptitious discount. The customer is then incited to make forays into the scrap market for additional supplies of scrap for conversion, and these forays are always at premium prices. They serve as another disruption in the market for smelters' raw materials, and end by placing just so much more of that raw material supply under the control of the primary producers. Finally, the reason might be the determination to make it impossible for the smelting industry to operate.

As for the shortage of primary metal, it is recognized that prior to mid-1956, we had been faced with recurrent shortages of primary aluminum production all the way back to the late thirties and beyond. In these periods of shortages, there was then no doubt as to the motive for producers scrap purchases. It was to augment their supplies of metal, and when purchased in an open and free market without coercion of any kind, was well within their rights, both morally and legally.

But in 1957, there was no shortage of aluminum. In that year, while producers were offering and shipping heavy tonnages of excess metal to Government stockpile, and their inventories of metal over and above those offerings were increasing, intake of scrap by producers, through purchase and conversion, rose to the highest in history with but one exception. That exception was 1953, a year of Korean-induced acute metal shortage.

The table attached as appendix B shows producers' scrap acquisitions by quarters for the years 1950 to 1957 inclusive.

From this table, it will be noted that in 1953, the producers acquired 232 million pounds of scrap. In 1957, in the first 11 months, they acquired 184.1 million pounds, and in the third quarter of 1957 alone, when they admitted that metal was really in excessively long supply, they increased their scrap purchases to 54.8 million pounds, the highest of any quarter in history other than the last three quarters of 1953. Since there was no metal shortage, some other reason must have existed for these heavy scrap purchases. What was it?

Does it not seem peculiar that during the third quarter of 1957 when purchases were so high and stockpile shipments and offerings so heavy, that on August 10, the Daily Metal Reporter, under the headings of "Scrap Metals," on page 8, had this to say:

> Chicago area smelters were offering 18.50 cents for 25 aluminum clips, and 14.50 to 15 cents for sheet and cast, but most available aluminum scrap was reported moving to primary producers who were paying 2 cents and more per pound over what the smelters were offering.

Why? Were some smelters trying to buy scrap at below market prices, or were producers actually pushing up the market for some reason or other? If the latter, for what reason?

What was the market for aluminum scrap on August 10, 1957, the date of the quoted article?

The August 10, 1957, issue of the American Metal Market, another metal trade paper, quoted smelters' market prices for aluminum scrap as shown in appendix C. I shall not read this table in its entirety, but will cite only the first item which is alloy 1100, that is, 25 aluminum clips which are quoted at 18 to 19 cents per pound.

This is the item for which the Daily Metal Reporter stated smelters were offering 18½ cents. That certainly indicates that smelters were not trying to buy their supplies at other than the current market. The question then arises, were the producers actually paying 2 cents and more per pound over the market, as reported in the Daily Metal Reporter? If so, why? Were all the producers involved? or 1? or 2?

This committee has the power to determine the correct answers to these important questions, and I feel the committee will wish to have them answered for a complete and adequate report on their findings. I am not, for my own knowledge, interested in what individuals or companies have done. Figures of individual companies are not of primary interest to me. I am interested in overall figures. I am concerned over the fact that a reputable paper reported that over the market prices, were being paid by producers. I am gravely concerned over the position of power thus held by the producers over my industry through the avenue of scrap acquisitions.

I am most deeply concerned over this threat of control and regardless of whether the character of the control may be benign or malignant—it should not exist. I believe this committee also is concerned over the impact such moves have upon small business elements in the smelting and foundry industries, and certainly will wish to inquire more deeply into them.

The threat is like a Damoclean sword. The incident of heavy scrap purchases in a period of metal abundance is an indicator, as would also be scrap purchases at well over the going market price, and deals whereby the raw materials of the smelting industry is made the vehicle for carrying surreptitious price cuts on mill shapes. These items are of deep significance and well merit searching scrutiny by this committee for the protection of the small businesses affected.

One witness in the hearings held by this committee on November 18, 1957, that is, Mr. Hickman of Alcoa, when replying to a question of the chairman as to why scrap purchases and imports of primary aluminum were not alike with respect to put rights contracts stated bluntly:

> Historically scrap had always been purchased and had to be purchased in a certain ratio to primary production in order to take it off the market (stenographic transcript of testimony, p. 118).

Now there's a frank statement. Certainly, the committee will wish to ascertain why a virgin producer deems it necessary to take scrap off the market. Incidentally, what was the ratio? Do they feel the same ratio should adhere in the face of the vastly increased primary production, and the fact that the ratio of scrap generation has declined materially over the years? Without full knowledge of these actions and the reasons therefor, the findings of the committee cannot be adequate for the full protection of the rights of small business which I am certain this committee is determined to effect.

While on the subject of scrap acquisitions by producers, mention should be made of the acquisitions with reference to the put rights in the expansion contracts.

Last year, at the time the imports of primary aluminum were under negotiation for effect against the put rights, we voiced our position to Senator Robertson, chairman of the Joint Committee on Defense Production, and to Mr. Floete, Administrator of General Services Administration.

We stated that when it came to offsetting against put rights, we could discern no difference between imports of primary metal and scrap acquisitions by the producers. Our position was based on the fact that either action served to make more metal eligible for stockpiling than would have been the case without imports or scrap purchases. Without these avenues open, more production from the domestic potlines would go into consumption, less be available for stockpile, and pressure on the scrap market would be lessened.

We contended that both imports of primary and producers scrap acquisitions should be treated alike, and if one were to be offset so also should the other.

In a letter to us dated August 6, 1957, Senator Robertson stated:

> Yesterday I discussed with Mr. Floete the matter of scrap purchases by the three companies in question, and we were both of the opinion that for practical purposes there was no difference between importing aluminum from Canada and purchasing scrap in this country, and that both items should be deducted from the put rights in question.

Nevertheless, in spite of that declaration, the contracts were negotiated without the inclusion of scrap purchases as offsets against the put rights.

We realize that relatively soon the put rights will expire, that most of the "water has already passed over the dam," and that offsets against put rights will soon be a purely academic question.

It is felt, however, that this should be made a part of the record of this committee, as an illustration of the multiple lines of approach the producers have had toward continuing control on the secondary industry via its raw material.

(III) HOT METALS—THEIR FULL SIGNIFICANCE AND IMPACT

In the hearings held on November 18 and 19, 1957, the subject of the molten metal contracts, commonly known in the trade as "hot-metal deals," was an item of interest. Those deals, while not participated in by smelters, are of very real moment to the smelting industry because they constitute sales of metal for castings, which is the major business of the smelting industry. When a price is established for 1, or 2 or 3 large foundries, it establishes a basis for re-evaluation of secondary alloys if other small and independent foundries are to retain the ability to compete, or, in fact, to exist.

Heretofore, the basis for comparison between primary and secondary alloys has been the so-called potline alloys A–2312 and A–2393. These were originally rough alloys sold in 50-pound pig form to foundries in competition with the finished alloys sold by smelters. They have since been offered in smaller sizes to meet the sizes always furnished by smelters and normally used by the majority of foundries. If smelters prices exceed the prices of these potline alloys in times of

comfortable metal supplies, then smelters could not compete, but when secondary prices are at, or below, potline alloy prices, the smelter and his foundry customer could hold their own in competition.

Hot-metal deals then appeared, and knowledge of them slowly evolved. The first of these deals was comparatively minor in tonnage, and no outsider appeared to have any knowledge as to the terms of the contract pricewise, or otherwise. Then in 1957, by virtue of the SEC requirements, a knowledge of the terms of new hot-metal contracts of major significance and the details of the earlier smaller contracts became known.

Here was a startling new basis for pricing, much below the established potline alloy prices.

Must the smelting industry be forced to consider these hot-metal prices as the normal ceiling for secondary alloys under which they must operate to keep themselves and their foundry customers alive? How could it be possible to do so with the price of scrap being the major determinate of smelters alloy costs, and scrap subject to manipulation upward pricewise at the whim of the very producers who set the price for hot metal?

During the November sessions of this committee, much effort was put forth in an attempt to justify hot metal as a new product, and considerable conversation was indulged in, in trying to visualize the process of pigging hot metal. The record may be clarified by pointing out the homely parallel that pigging hot metal is nothing more or nothing less than the process the housewife exercises when she pours hot jelly into a glass to cool and solidify. Were she to bypass the cooling process and take the jelly directly from the stove to the table, hot, she would still be serving jelly, not a new product.

Now, no one can possibly question the legitimacy of hot-metal deals if such deals are made at prices which accurately reflect only the saving to the producer of the actual cost of transforming hot metal to the pig form and transporting the pig. Please note I have said saving of cost to the producer, since no other factor of value to either the producer or his customer can be taken into consideration in determining whether or not actual cost is reflected. Do the prices in the controversial hot-metal contracts reflect only the saving to the producer in the cost of pigging and transporting? If so, then nothing more needs to be said concerning them. But it has not yet been determined that such is the case. In fact, there is grave doubt that the prices do reflect bare savings of cost.

If the prices reflect more than the actual cost of pigging and freight, does that not constitute a discount on metal prices, not generally available and, therefore, preferential, and does it not, therefore, place secondary prices under an unfair and unnatural ceiling?

In addition, does it not also place the small independent foundry under restrictive handicaps?

From the formula for pricing contained in one of the contracts, that is, Ford, now of record with this commitee, it is clear that the price reduction on the aluminum content of the hot metal amounts to 10 percent of the list price of pig after deducting a freight factor. Thus, with 26 cents pig and a freight factor of 0.7655 cents as used in the formula of one of the contracts, the discount for hot metal would amount to 10 percent of 25.2345 cents, or 2.5234 cents per pound.

Is the cost of pigging 2½ cents per pound?

In the stenographic transcript of the testimony of the November 18 hearings, page 74, the chairman in questioning Mr. McConnell of Reynolds, asked the question:

Putting that in another way, does this mean that it costs 10 percent to pig hot metal?

No direct answer to this question was given. The witness, did, however, on page 76, present a long list of qualifications in broad terms affecting the cost of pigging, but no actual cost was recited.

On page 145 of the transcript is shown the record of questioning of Mr. Wilmot of Alcoa by the chairman, who asks:

Does it ordinarily cost Alcoa as much as 10 percent to convert hot metal into pig?

To which Mr. Wilmot replied:

No, it does not.

Again, on page 186, the chairman asked Mr. Rhoades of Kaiser:

Does it cost Kaiser as much as 10 percent to convert molten metal into pig?

To which, on page 187, Mr. Rhoades replied:

Ten percent of what?

Mr. Yates:

Of the published price.

Mr. Rhoades:

Of the published price? No, I do not think it costs that much.

Here are two statements which contradict the premise contained in the hot-metal contracts. That is the premise that pigging actually costs 10 percent of the list less freight, or 2.52 cents per pound on 26-cent pig.

The committee will, I am sure, deem it essential to specifically ask Alcoa, Kaiser, and Reynolds to state what their costs of pigging are in cents per pound, inasmuch as 2 of them have stated that it did not cost the 10 percent of list claimed by the other.

The attention of the committee is also directed to the testimony of Mr. Ward of Ford Motor Co., who testified on November 19, page 289, page 291, that they had also asked American Smelting & Refining Co. and Apex Smelting Co. for quotations.

When requesting Alcoa, Kaiser, and Reynolds for actual costs of pigging hot metal, I am sure the committee will deem it only fair to ascertain if American Smelting & Refining Co. and Apex Smelting Co. quoted the Ford Motor Co. on any basis which would reflect the cost for pigging hot metal, and, if so, what that cost might have been.

In an effort to conserve time for the committee and others, I inquired of a number of members of Aluminum Smelters Research Institute, including American Smelting & Refining Co. and Apex Smelting Co., as to whether or not they had quoted Ford Motor Co. on a hot metal versus pig basis, and, if so, what difference, representing pigging costs, was reflected. I specifically asked that, in any event, they advise me as to what their pigging costs are, so that I might present them to this committee.

With your indulgence, I should like to quote from the replies I have received; then, if it is your wish, I shall file the originals with the committee as a part of the record.

Apex Smelting Co. replied as follows, under date of March 4, 1958:

DEAR MR. BURTON: In accordance with your request we are pleased to inform you that we submitted a proposal under date of May 4, 1955, to Ford Motor Co., to furnish them with molten metal, or what is commonly known as hot-metal deal.

In our computation of costs, we calculated a figure of $5 per ton for palletized pig. In other words, our price per pound of hot metal would be $5 per ton less than that of the palletized pig.

Should you desire any further information pertaining to this proposal, please advise us.

This letter is signed by Mr. L. Lippa, president, Apex Smelting Co.

Aluminum & Magnesium, Inc., under date of March 5, 1958, and over the signature of Mr. J. G. G. Frost, president, although not indicating that they had made any definite proposal to the Ford Motor Co., reads as follows:

Our company, Aluminum & Magnesium, Inc., Sandusky, Ohio, pours, bundles, stores, and ships 30-pound aluminum ingots for a direct labor charge of less than one-quarter of 1 cent. This charge also includes the cost of the steel strapping.

We have compared this with a possible hot-metal delivery close by in our town.

1. The equipment required for molten metal transportation would be considerably more expensive than a pouring machine.

2. Either the smelter or the customer must maintain a large holding furnace for each alloy involved or production delays at either end would be unavoidable and serious.

3. The depreciation cost for molten metal delivery would be much the highest of the two. Other overhead items about the same.

American Smelting & Refining Co's. federated metals division, replied under date of March 6, in the following manner:

With reference to our recent discussions concerning our quotations in May 1955 to the Ford Motor Co., relative to our erecting a plant to supply them with molten alloy, we indicated to Ford at that time that in the event that we wished to deliver, and they wished to receive some of this alloy in pig form, the additional cost would not be over $10 per ton for pigging, and, probably, in the neighborhood of $7.50 to $8.50 per short ton. This was a conservative figure on our part, as our actual cost of pigging alloys then was slightly over $6 per ton.

This letter was signed by Mr. G. M. Baumann, general manager, central aluminum department, federated metals division, American Smelting & Refining Co.

There, gentlemen, you have examples of actual cost of pigging hot metal. When reduced from dollars per ton, they range from a little less than one-quarter of a cent to about one-third of a cent per pound.

These costs are a far cry from the 2.52-cent discount on aluminum content reflected in the hot-metal contracts.

What causes this wide divergence?

My powers of credence will not accept the belief that the manufacturing efficiency of smelters exceeds that of the producers by any such margin. There must, therefore, be other reasons.

What are they?

They need to be brought into the open, examined, and corrected if found to be inequitable.

As to the freight factor, there is also serious doubt in my mind as to the propriety of that item as calculated in the contracts for delivery of metal to a location immediately adjacent to the reduction plant where the hot metal is produced.

If a small foundry located in Sheffield, Ala., or in Rooseveltown, N. Y., were to send its own truck to the reduction plant to pick up pig, would the deduction from the 26-cent pig price allowed as freight be exactly the same as the freight factor used in the hot-metal contract, or would it be the actual freight which the producer would have paid had he delivered the pig to Sheffield or Rooseveltown?

If it would not be precisely the same as allowed in the hot-metal contracts, then is the holder of the hot-metal contract not being given a further preference in metal cost not available to others?

I feel this point also is eminently in need of clarification.

The aluminum smelting industry has never asked for handouts of public money, for guaranteed markets, or other props or crutches under its business. It does not do so now.

The industry I represent asks only that it shall be free to operate independently under the law, to compete on an equal basis in an open, competitive market, and to serve its customers under such conditions, free from dominance or the threat of dominance by its competitors.

The preservation of such an unfettered and nonsubsidized status for all competition in the aluminum casting alloy field will go far to insure the right and the power of the small independent smelter and foundryman to exist, and to prosper according to the quality of his product, his efficiency, his effort, and his services to his customers.

Gentlemen, that concludes my formal statement, and I am at your service to try to answer any questions you may deem within my province.

Mr. YATES. Thank you, Mr. Burton, for a very comprehensive statement.

You asked the committee a lot of questions. Do you have any of the answers?

Mr. BURTON. I think, Mr. Chairman, that the committee has the power to get the answers that are very evidently there, and which are not available to us as competitors or as individuals.

Mr. YATES. Well, I wonder whether, in the course of the operations of any of your member companies they have had occasion to tell you that the purchases of scrap were being used as a source of rebate?

Mr. BURTON. Yes, they have.

Mr. YATES. They have told you that?

Mr. BURTON. They have told me.

Mr. YATES. Can you tell the committee more about that, under what circumstances?

Mr. BURTON. That the apparent motive was to cut the price of fabricated wrought products, mill shapes—those distributing their published, circulated list price of those forms; but, by inviting the customer of the mill shapes to ship scrap to them for credit against the order for the mill shapes, they would be given a premium which I have heard was as much as 2 and more cents per pound. Then, the purchaser of the mill shape is certainly interested in going out and buying more scrap and giving away part of his discount to get the scrap to gain an additional smaller discount on the mill shape.

Mr. YATES. Is this part of a conversion deal?

Mr. BURTON. That is part of the conversion deal.

Mr. YATES. Which of companies does this?

Mr. BURTON. I have heard of conversion deals by all of them, all three of the major producers.

Mr. YATES. Well, I think they testified that they were engaged in these conversion arrangements, but which of the companies gives this premium?

Mr. BURTON. I cannot answer that. I have not heard. I don't know whether it is 1, 2, or 3 of them.

Mr. YATES. You stated that one of your members told you that this was being done.

Did this member tell you which company was doing it?

Mr. BURTON. No, he did not.

I therefore would not attempt to put a name on it, because I——

Mr. YATES. I thought he had told you the name of the company.

Mr. BURTON. No, sir.

Mr. YATES. Did you check it to find out whether it was the fact?

Mr. BURTON. I have no way of checking that. I mean, to get accurate information. No one is obligated to give me any confidential information other than my own members. I have no access to their customers nor to the producers or their customers. I have no means of checking it. The only way I would know to check it would be in the accounts of those who actually participate.

Mr. YATES. How prevalent is this practice? Did you just hear of one instance of this?

Mr. BURTON. No, no. It has been discussed within the industry for quite a long time and quite generally. Over a period of years, as a matter of fact. And it is particularly bad when scrap is short, or when mill products sales are a little lean.

Mr. YATES. If we have such an overabundance of aluminum, now, why should primary producers be buying scrap?

Mr. BURTON. I would like to know. I tried to recite the only reasons I could think of why they would want to buy scrap, and the most cogent reason that I can think of would be to keep the price of secondary metal more within range of their own quoted prices for ingot, in order to make these special contracts look more palatable to their customers.

Mr. YATES. Your appendix A shows that the purchases by producers of scrap has gone up significantly since 1950, but it also shows that the purchase of scrap by others has gone up, too.

Mr. BURTON. That has gone up, yes.

Mr. YATES. Except for the smelters. Why?

Mr. BURTON. The smelters have gone up.

Mr. YATES. Why?

Mr. BURTON. The smelters have gone up.

Mr. YATES. There is a reduction in the purchasing of scrap by the smelters.

Mr. BURTON. That is true. In 1957 there are 11 months. The 12 months——

Mr. YATES. That is right.

Mr. BURTON. For the producers.

Mr. YATES. Why has there been this falling off on the part of the smelters?

Mr. BURTON. I cannot answer that, other than the fact that there probably was a trailing off during December in the rate of shipments of the smelters. Consequently, their scrap intake was adjusted accordingly.

Mr. YATES. Incidentally, how is business for the smelters, what is the condition?

Mr. BURTON. Fair.

Mr. YATES. What is the condition of the industry?

Mr. BURTON. I wish I could crow, but I cannot. I think it is now running at about 20 percent below last year, but I have a feeling that it is now dragging the bottom, and that any change is more apt to be upward than any other way.

Mr. YATES. Is this true in spite of the increased purchases of scrap by the primary producers?

Mr. BURTON. I think so.

Mr. YATES. Then, where are you being injured by the scrap purchases?

Mr. BURTON. We have been—scrap purchases?

I almost got confused with another question that I expected you to ask. [Laughter.]

On scrap purchases, if the primary producers are running the price of scrap up beyond the market which is established by the dozens of bidders, it means the smelters have to increase the purchase price to get the scrap that they require. And since scrap prices constitute the major item in the cost of smelters alloys, the price of the alloys must also go up if the scrap prices go up.

Therefore, it brings us closer to this ceiling which is the primary alloy price, and leaves no room whatever for any further upward movement on scrap prices.

Mr. YATES. I can appreciate the response that you have given, and I can recognize the fact that a danger does exist, at least upon a theoretical basis. You have stated, however, that your business is in good condition, doing perhaps 20 percent less than last year.

Mr. BURTON. Right.

Mr. YATES. But you anticipate that from here on in your business will be better.

Now, is this fear of yours founded in fact? If you are going to do better, it seems to me that you may be raising a bogey that has no basis in fact. Am I wrong in this conclusion?

Mr. BURTON. I think you are, because these things tend to narrow down. They spread between the cost of scrap and the price at which the smelter can sell his alloy.

Mr. YATES. Tell us about that.

Mr. BURTON. To the point where profit becomes extremely pinched or nonexistent.

Mr. YATES. Well, is that true today?

Mr. BURTON. I have heard a great deal of screaming in the smelting industry of no money having been made in it in the past year. Now, I do not mean to infer that there has been no money, but they have used that as an illustration of the fact that the profit involved in the smelting industry is far, far less than it normally could be expected to be in 1957. The volume of business was there; the profits, apparently, were not.

Mr. YATES. I feel the need for an additional table. Your tables are good; you show what scrap consumption has been over the course of the last 7 years; you also show a price, as of August 10, of scrap. Would it not be well for the committee to know what the scrap market has been during the course of the year——

Mr. BURTON. Well, I will be very happy to compile——

Mr. YATES. Have the prices gone up over the course of this year?

Mr. BURTON. Yes.

Mr. YATES. In the last few months?

Mr. BURTON. As I recall, they have. I will be happy to furnish the committee with a listing of representative items, if you please. I do not think it is necessary to quote them all.

Mr. YATES. The reason for my question is this: If what you fear is true, and the companies are buying more scrap and increasing the prices, should not the price of the scrap, of these representative items of scrap, gone up in the last few months?

Mr. BURTON. No; there has not been the pressure on the scrap market in the last few months that there normally is, because of the slowdown in the automotive industry. The releases of smelter's alloy for casting purposes have not been as strenuous.

Mr. YATES. I appreciate that answer. Perhaps I used your statistics for 7 years and applied them in terms of scrap buying for 1 year. I think I may have fallen in error in that.

Mr. BURTON. If you would like, I will be happy to prepare a table of representative scrap items showing the movements all through the year of 1957, if it would assist you.

Mr. YATES. I think the committee should know just how the scrap market is moving up in terms of the monthly purchases by the producers. Is there a relationship between the purchase of scrap by the producers and the fluctuation in the scrap prices? I gathered the impression from your testimony that there was.

Mr. BURTON. I think there is, and I think——

Mr. YATES. Will that be reflected in the statistics?

Mr. BURTON. It should be, but I think the fact will be more adequately displayed in taking a look-see at the scrap activities over a representative period of some or all of the producers.

Mr. YATES. All right.

Mr. BURTON. If you go to the source, you get the truthful information.

Mr. YATES. All right. What would be your suggestion in that respect; what should we look for?

Mr. BURTON. I want to review the scrap acquisitions, not only purchases. I would want purchases and total receipts of scrap by the producers during any specific period, the first 6 months, the last 6 months of 1957, or quarters. Relate the conversion-scrap acquisitions to the sale of mill shapes, and at what price the scrap was accepted.

I read you an excerpt that on August 10 the smelters were offering 18.5 to 19.5 cents for 2S clips, and the producers were offering 2 cents a pound and more over that. That is over 20 cents a pound.

Mr. YATES. That is one example. Do you have other examples of where the producers are purchasing over the market?

Mr. BURTON. I have no specific item. I have had to give you that as being reported to me by my members, and I do not have the names of any companies involved.

Mr. YATES. Do they find out, in their efforts to purchase scrap, that they are being outbid by the producers?

Mr. BURTON. Very often; yes, sir.

Mr. YATES. Over and above the market price?

Mr. BURTON. It causes the market, then, to increase?

Mr. YATES. I know it does, but I wonder whether they are being outbid over the market price?

Mr. BURTON. Yes; I am sure your investigation will prove that there are over-the-market prices allowed, particularly where conversion deals are involved.

Mr. YATES. Now, is this premium arrangement related in any way to the purchase of primary ingot?

Mr. BURTON. No, sir; I do not think it has anything to do with ingot sales. I think it is purely on the fabricated mill shape——

Mr. YATES. My question was, I wonder whether this serves as a discount for the purchase—this might serve as a discount for the purchase—of pig, primarily metal.

Mr. BURTON. A conversion deal serve as a discount on the purchase of pig. It is conceivable that it could. I have not heard of such a case, but it is conceivable that it could.

ALUMINUM SMELTERS RESEARCH INSTITUTE,
Chicago, Ill., March 14, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3,
Select Small Business Committee,
Washington, D. C.

DEAR MR. YATES: In reviewing the transcript of my testimony of March 12, I note that on page 533, in the first and third paragraphs, in answering your question, "Now, is this premium arrangement related in any way to purchase of primary ingot?" I failed to be completely lucid.

My answer was based on your phrase "primary ingot" and was correct since I was at that time referring only to casting ingot. I should have explained that I believe there may have been premium arrangements via conversion on the sale of extrusion billet (sometimes considered as an extruding ingot). Also, I have repeatedly heard of the purchase of outside scrap premium prices, in the market, for return to producers on conversion deals wherein the resultant billet may or may not have been billed to the extruder at list price.

Sincerely yours,

CARL H. BURTON, *Secretary.*

Mr. YATES. I want to move over to the hot-metal contract for a moment. You have testified as to the costs of pigging, or ingoting of several of your members, and the response that was given by Mr. Wilmot of Alcoa, and Mr. Rhoades of Kaiser, that it did not cost 10 percent. Is pigging or ingoting a part of mill costs?

Mr. BURTON. Yes. Yes, sir; it would be

Mr. YATES. Well, it is interesting to note that in the table which I referred to yesterday, in the case of *United States* v. *Aluminum Company of America*, that with respect to the mill costs set forth for the companies for the years 1947 through 1956, inclusive, those mill costs apparently were Reynolds. So that, does this bear upon whether or not the cost of pigging for Reynolds would be less than it would be to Alcoa, or to Kaiser?

Mr. BURTON. If their overall mill costs were lower, I would expect to find that all items in their mill cost were fairly proportionate, one to the other. And if they are lower, then your pigging cost must be low. And I cannot conceive of the addition of an overhead burden sufficiently high to bring it from a quarter of a cent to 2.5 cents.

Mr. YATES. I was impressed with Reynolds' efficiency as I went through the tables. I mean, order for each year. Reynolds' costs are lower than those of Alcoa or Kaiser, and I wondered whether or not the pigging process was part of the mill cost?

Mr. BURTON. It would be.

Mr. SHEEHAN. Mr. Burton, you state that you are a member of the ASRI, which provides 80 percent of the total amount of aluminum output?

Mr. BURTON. Yes, sir.

Mr. SHEEHAN. How many members do you have in your association?

Mr. BURTON. 14.

Mr. SHEEHAN. 14?

Mr. BURTON. Yes, sir. It was 15 during 1957. We have had a casualty.

Mr. SHEEHAN. What is the distribution of the 15, do they all get about an equal share, or 2 or 3——

Mr. BURTON. No; it is pretty widely spread. There are four members at the top bracket who produce larger quantities, and the balance are medium sized to very small.

Mr. SHEEHAN. What percentage, of your upper bracket, would you say these four large ones produce?

Mr. BURTON. About 50 percent of our production.

Mr. SHEEHAN. The other 10 produce the other 50 percent?

Mr. BURTON. Yes, sir.

Mr. SHEEHAN. You talk about the tremendous rise in the purchase of scrap by the producers, pointing out the fact that the highest of any quarter in history was purchased during last year. Maybe you do not know, but are the producers using this scrap or storing it?

Mr. BURTON. Oh, I would suspect they are using it. I cannot conceive of them piling it up and piling it up. It takes a tremendous amount of space to store up aluminum scrap, and I would expect that it was being used, blended into their production, or, in some cases, used in the production of castings.

Mr. SHEEHAN. In other words, the assumption could also be made that they can buy it cheap enough so they can save money by blending it in with——

Mr. BURTON. That is correct, and this displacing a little production to go to stockpile, a little primary production.

Mr. SHEEHAN. I ask that question because the thought was left in my mind that maybe if there was a possibility they were doing that to rig the market, they would have to store it up, but apparently they can use it, part of it——

Mr. BURTON. Up to this time, I should say there is no evidence they are trying to store it up. But it will take a lot of space if they ever do.

Mr. SHEEHAN. How many producers were there, or smelters, in 1950? Do you have any idea?

Mr. BURTON. This I will have to give you purely from recollection. I would suspect that in 1950 there was somewhere in the neighborhood of 70, all over, small, large and in between.

Mr. SHEEHAN. Let's take 1953. I know you are guessing, but approximately?

Mr. BURTON. There would not be much of a material change by 1953.

Mr. SHEEHAN. 1956?

Mr. BURTON. Probably it was down to, maybe, 65, or somewhere in that neighborhood.

Mr. SHEEHAN. And yet there has been, apparently, no big increase in the number of people going into the smelting business, but the proportion of the business is practically doubled.

You show the smelters with scrap consumption of 384 million pounds in 1950, and apparently in 1957 it will be close to what it was in 1956, 663 million.

Mr. BURTON. No, it won't be quite as high as that when December is in, because the December intake of scrap was lower. I have to give you this purely as an estimate, that I expect the scrap intake for the whole year of 1957 will amount to more nearly 645 million to 650 million pounds.

Mr. SHEEHAN. Well, that is close enough.

Mr. BURTON. For the smelters.

Mr. SHEEHAN. To me, it looks as though there was from 1957, approximately—and I have not calculated correctly—an 80 percent increase in tonnage.

Mr. BURTON. We will accept that.

Mr. SHEEHAN. And the amount, or the number of people in the busi- is approximately the same. So, therefore, we see sort of a trend there where either the same, or a less number of companies are doing far more business.

Mr. BURTON. Yes; I think that would probably be true. There are some of these companies—there are about five, as I recall it, that have passed completely out of the picture. There may have been 1 or 2 come in and have gone out. But the number remains practically the same of those who produce an appreciable quantity of metal. There are many smelters in the country whose production is extremely low. They are actually sweaters who are called smelters by virtue of the fact that they were on the BDSA list of melters of aluminum, and there is quite a far cry between a melter and a smelter.

I can melt aluminum on my wife's kitchen stove if I put a blower on it, but I am not a smelter, and I could not be, because I have no metallurgical control.

Mr. SHEEHAN. Let's assume, then, that we confine our remarks, the following remarks, to mean smelters who are in the business, as you stated, in a regular way and not as an offshoot or a byproduct.

What was their profit picture, the average smelter, in 1956.

Did he make a profit?

Mr. BURTON. I cannot answer that, Mr. Sheehan. I do not know that anyone other than the revenue department can, because practically every smelting unit in the country is an individual or family held company with no securities in public hands, and, therefore, not obligated to publish a financial statement.

The American Smelting & Refining Co's. federated metals division, of course, includes their figures in A. S. & R.'s overall report, but I have no way of picking out of that what was applicable to the Federated division.

The Apex Smelting Co. and American Alloys of Kansas City are the only two smelters that I know of who publish a financial statement and who are out-and-out smelters of aluminum.

A. S. & R., as you know, has many other metals in the fire, both primary and secondary.

Mr. SHEEHAN. The thing I am trying to get at, Mr. Burton—and I realize you stated to Mr. Yates, here, that the smelters were 20 percent down from last year—and I assume you are talking in business——

Mr. BURTON. In tonnage.

Mr. SHEEHAN. Tonnage. Volume. Of course, that will not quite be true, because last year their tonnage was 663 million pounds, and you are estimating this year——

No; I am sorry. You were right. The 1957 figure was 645, and you are comparing 1958 with 1957 in your answer to Mr. Yates.

Mr. BURTON. That is correct; yes, sir.

Mr. SHEEHAN. The point I was trying to get at is this: I am trying to bring profits into it, because I fully realize, like all businessmen, if I went along for 10 years making $10,000 a year profit, and then I came into the 11th year and I made $50,000 a year profit, and then into the 12th year and only made $30,000 a year profit, I would gripe like the devil because I did not make $50,000.

Mr. BURTON. That is correct.

Mr. SHEEHAN. But we always have to compare that to what has been historical and normal; isn't that right?

Mr. BURTON. What I would like to have—and I have tried unsuccessfully—I would like to receive a record of earnings in my industry over a period of years. I have no way of forcing that. I think it would be excellent for the industry if I could sit down here and recite that the smelting industry over this period of years has shown this profit net after taxes, or any other way that you wanted it; but I cannot because they simply do not divulge those figures.

Mr. SHEEHAN. I would say that from my standpoint that any comparison with the previous years has to be based upon what was their normal profits.

Mr. BURTON. Exactly; and not on an abnormal period.

Mr. SHEEHAN. That is all.

Mr. YATES. Mr. Multer?

Mr. MULTER. No questions.

Mr. YATES. Mr. Dalmas?

Mr. DALMAS. I would like to ask 1 or 2 questions, Mr. Chairman, if I may.

Mr. YATES. You may.

Mr. DALMAS. Mr. Burton, in your appendix A, looking at those figures and figuring a few percentages quickly, I notice in 1950 the producers used about 30 percent in comparison with what the smelters purchased.

I suppose those are purchases, are they not? 1951, 30 percent; 1952 30 percent; 1953, 42 percent; 1954, 40 percent; 1955, 27 percent; 1956, 26 percent; and then 1957 jumps back to 30 percent.

So, those figures go all over the lot to some extent?

Mr. BURTON. That is right.

Mr. DALMAS. Now, on your table B, you give scrap consumption by producers—producers' scrap consumption.

I would like to ask this: Do those figures include simply the figures on table A—there is no home-generated scrap at all in those figures?

Mr. BURTON. We take into consideration at no time any of the scrap which is called "run-around or home scrap, which never appears on the market.

Our discussion of tonnages on scrap is only that scrap which appears in the market for public bid.

Mr. DALMAS. Thank you, Mr. Burton.

Such as is reported by the Bureau of Mines?

Mr. BURTON. That is correct; yes, sir.

Mr. DALMAS. I notice in reading the November scrap report on secondary aluminum it says that the independent secondary smelters used 27,986 tons or 73 percent of 38.585 tons reported used in November, and primary producers used 7,755 tons, or 20 percent, and foundries, fabricators, and others used 2,844 tons, or 7 percent.

If you look at table A, and took out the "other"—I do not know what the "other" is, exactly?

Mr. BURTON. The "other" would be foundries that used scrap direct, or chemical companies.

Mr. DALMAS. And then the Bureau estimates that full coverage would show November scrap consumption of 45,000 tons and ingot production of 28,000 tons.

Now, what does that mean, there is that much shrinkage in 28,000 tons of scrap?

Mr. BURTON. Your melt loss or shrinkage is determined primarily by the type of scrap, then by your efficiency in your operation. It has been the general policy within the industry to assume a 10-percent loss for every ton of scrap. For every ton of scrap you would come up with 90 percent of that as ingot.

Mr. DALMAS. Well, do you consider these figures that I have just quoted in here, these percentages—I am just taking the smelters and the producers, I am not taking the total scrap and figuring out those percentages, in view of the variance in those percentages of what the producers may have bought as compared to what the smelters may have bought—Do you feel that the fact that purchases in the 11th month of 1957 were up 4 percent over the 12 months of 1956 is a trend?

Mr. BURTON. I am afraid it is. I am very much afraid it is. I would point out to you that the scrap purchases of the producers have gone as high as 27 percent of the scrap in certain months. There must be a reason. Why? They did not need the metal, they had the metal themselves. They were pushing it into the Government stockpile.

Mr. DALMAS. That is all, Mr. Chairman.

Mr. YATES. Mr. Burton, is it possible to tell how much of the scrap is used for the manufacture of primary aluminum?

Mr. BURTON. I suspect that the producers themselves might be able to tell you how much of their scrap is blended into their primary products. I would have no way of knowing.

Mr. YATES. Is it called primary——

Mr. BURTON. Surely.

Mr. YATES. Could this primary aluminum then be handed to the Government?

Mr. BURTON. Why, surely.

Mr. YATES. Under their contract?

Mr. BURTON. It could conceivably be. But it is mostly, I think, blended into their wrought products, their mill products shipment. Not in their potlines, where the original pig is produced, which goes to the Government stockpile, but into the fabricating plant which produces the mill shape. That is my supposition.

There are no published statistics on that point. That is purely an internal operation.

Mr. YATES. How will the hot metal contract affect your business?

Mr. BURTON. We are locked out of that proportion of the growth of the automotive industry which is represented by the amount of metal which will be taken on hot metal deals. We have seen the effect of it.

I was given an incident within the past week of where a smelter who has been selling Ford Motor Co. secondary ingot for castings was told on his call last week that they would be unable to buy any secondary because they had to consume the metal they were getting at Lister Hill. No smelter will have an opportunity to even bid on 64 million pounds per year. They are locked out, just as the independent diecaster is locked out of that possible business.

Mr. YATES. If they were given an opportunity to bid; could they compete?

Mr. BURTON. No; you could not compete with a price like that. If you are paying 20 cents a pound for scrap, how could you sell ingot at 22.6, or whatever it figures out to be?

Mr. YATES. What is the comparable price in pounds that Apex offered to furnish hot metal for Ford?

They talk about $5 per ton for palletized pig.

In other words, the price per pound for hot metal would be $5 per ton less?

Mr. BURTON. That is right. They did not quote me what their cents per pound on either the hot metal or palletized pig was.

Mr. YATES. I see.

Mr. BURTON. They only gave me the difference, and the difference was the thing I was most interested in, because it proves the point that I hope I made: that pigging costs are nowhere near 2½ cents a pound.

If it costs 2½ cents a pound to pig metal, the price of aluminum would be back in the jewelry metal class.

Mr. YATES. Well, I can see your purpose in seeking that information.

I think, too, the committee might want to know what was the price at which Apex offered Ford to furnish the aluminum for.

Mr. BURTON. I have no hesitancy in saying I am quite certain Apex would be glad to furnish the committee that information, and I will ask them to.

Mr. YATES. Do you think that Apex would be willing to submit its correspondence, or its negotiations with Ford on this to show what its offer was, so that it could be compared with Reynolds?

Mr. BURTON. I feel certain they would. He closed his letter by saying:

> Should you desire any further information pertaining to this proposal, please advise me.

I am sure they will. I will ask them if you would like.

Mr. YATES. Yes, the committee would like to have that for the record.

Mr. BURTON. I will be glad to.

Mr. YATES. Well, if there are no further questions, the committee will excuse Mr. Burton.

Mr. Burton, we thank you very much for your help to the committee and for furnishing us with such a comprehensive statement.

Mr. BURTON. Thank you, gentlemen.

Do you want these original letters for the record?

Mr. YATES. Yes.

(The letters referred to are as follows:)

FEDERATED METALS DIVISION,
AMERICAN SMELTING & REFINING CO.,
Detroit, Mich., March 6, 1958.

C. H. BURTON,
Secretary, Aluminum Smelters Research Institute,
Chicago, Ill.

DEAR CARL: With reference to our recent discussions concerning our quotations in May 1955, to the Ford Motor Co. relative to our erecting a plant to supply them with molten alloy, we indicated to Ford at that time that in the event that we wished to deliver and they wished to receive some of this alloy in pig form, the additional cost would not be over $10 per ton for pigging, and probably in the neighborhood of $7.50 to $8.50 per short ton.

This was a conservative figure on our part, as our actual cost of pigging alloy then was slightly over $6 per ton.

Very truly yours,

G. M. BAUMANN,
General Manager, Central Aluminum Department.

APEX SMELTING CO.,
Chicago, Ill., March 4, 1958.

CARL H. BURTON,
Secretary, Aluminum Smelters Research Institute,
Chicago, Ill.

DEAR MR. BURTON: In accordance with your request, we are pleased to inform you that we submitted a proposal under date of May 4, 1955, to the Ford Motor Co. to furnish them with molten metal, or what is commonly known as hot metal deal.

In our computation of costs we calculated a figure of $5 per ton for palletized pig. In other words, our price per pound of hot metal would be $5 per ton less than that of the palletized pig.

Should you desire any further information pertaining to this proposal, please advise us.

Very truly yours,

L. LIPPA, *President.*

ALUMINUM & MAGNESIUM, INC.,
Sandusky, Ohio, March 5, 1958.

ALUMINUM SMELTERS RESEARCH INSTITUTE,
Chicago, Ill.

(Attention: Mr. Carl H. Burton.)

DEAR SIR: Our company, Aluminum & Magnesium Inc., Sandusky, Ohio, pours, bundles, stores, and ships 30-pound aluminum ingots for a direct labor charge of less than one quarter of 1 cent. This charge also includes the cost of the steel strapping.

We have compared this with a possible hot metal delivery close by in our town.

1. The equipment required for molten metal transportation would be considerably more expensive than a pouring machine.

2. Either the smelter or the customer must maintain a large holding furnace for each alloy involved or production delays at either end would be unavoidable and serious.

3. The depreciation cost for molten metal delivery would be much the highest of the two. Other overheads about the same.

Yours sincerely,

J. G. G. FROST.

ALUMINUM SMELTERS RESEARCH INSTITUTE,
Chicago, Ill., March 14, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee Number 3,
Select Small Business Committee,
Washington, D. C.

DEAR MR. CHAIRMAN: Immediately upon my return to Chicago, I relayed to Mr. Lippa, president of Apex Smelting Co., your request that the committee be furnished with the exact cents per pound quoted to the Ford Motor Co. in the Apex proposal of May 4, 1955.

Mr. Lippa advises me that their quotation to the Ford Motor Co. was not a fixed, or flat price, but that it was based upon the cost of scrap and alloying ingredients in the open market at the time of shipment of metal to Ford, plus a processing charge.

Thus the cost of the metal to Ford might be a constantly, varying price, governed by the fluctuations in the market prices of scrap and alloying elements.

Mr. Lippa feels that, although they were willing to, and did, state their actual cost of pigging, the public disclosure of the complete processing addition would be to reveal their overall cost, and would thereby be of benefit to their competitors. They will, however, if you so request, reveal them for the confidential use of the committee.

I regret, therefore, that I am unable to fully comply with your request.

Sincerely yours,

CARL H. BURTON, *Secretary.*

Mr. YATES. Mr. Sheehan offers to amend my statement, and wants to include the fact we are particularly grateful for your coming, inasmuch as you come from the city of Chicago. [Laughter.]

Mr. BURTON. Thank you, sir.

Mr. YATES. Mr. Naisuler.

Mr. Naisuler, the committee would be pleased to have your testimony.

I understand that you are chairman of the Special Market Study Committee of the Aluminum Extruders Council?

Mr. NAISULER. That is correct, sir.

Mr. YATES. We will be pleased to hear from you.

Do you have a statement?

Mr. NAISULER. Yes, I have a statement.

Mr. YATES. Proceed, Mr. Naisuler.

TESTIMONY OF AARON J. NAISULER, CHAIRMAN, MARKET STUDY COMMITTEE, ALUMINUM EXTRUDERS COUNCIL; ACCOMPANIED BY LEONARD J. EMMERGLICK, COUNSEL

Mr. NAISULER. My name is Aaron J. Naisuler.

I am associated with Northeast Aluminum, Inc., of Lawrence, Mass., and appear on behalf of Aluminum Extruders Council, a trade association representing members of the soft alloy extrusion industry, as chairman of its market study committee.

This statement is being submitted in response to the request in a letter of the chairman of this subcommittee stating that the committee is specifically interested in information on the future of the aluminum industry and the position of small business in it.

In the concluding paragraph of the committee's report of July 26, 1956, on Small Business and the Aluminum Industry, it recommended that the Federal Trade Commission and the Department of Justice undertake studies and investigations with respect to those factors which may hinder the growth of small business in the aluminum industry.

Among such factors, the recommendation referred to the complaints of nonintegrated users that they are subjected to price squeezes by the primary producers on certain alloys.

Since that recommendation was made, the price squeeze applied to independent custom soft alloy extruders has been intensified by the so-called Big Three of the primary smelting industry: Aluminum Company of America, Kaiser Aluminum & Chemical Co., and Reynolds Metals Co., to the point where the profit has been squeezed out of soft alloy custom extruding for many of the extruders. There is now threatened a reversal of the trend of growth of the independent extrusion industry, a trend which the committee noted in its report.

The competitive abilities of independent custom extruders are being weakened not only by the intensification of the price squeeze, but also by other pricing practices of each of the Big Three.

From the cumulative experience of many of its members, the council recently concluded that there was prima facie evidence of price discrimination among customers, and sales below cost or at unreasonably low prices, with the purpose and effect of eliminating the competition of independent custom extruders, on the part of each of the Big Three.

This evidence, the council concluded, points to the subsidizing of loss operations in custom extruding by profits from the sale of pig, ingot or fabricated products and thus appears to be a misuse of size and integration.

Unless those practices are curbed, the future of the independent extrusion industry will be a downhill one.

Believing that a prompt remedy, applying the sanctions of available law, is necessary to preserve the independent custom extruding industry from severe attrition, the council has made a formal complaint to the Department of Justice against Alcoa, Reynolds, and Kaiser. It has lodged the information available to it with the Antitrust Division, and it is our understanding that the matter is receiving attenion in the usual course in which complaints of prima facie violation of the antitrust laws are handled.

We wish to cooperate with this committee to the fullest extent of our abilities, but we hope that the committee will no call upon us at this time to discuss the basis of our complaint filed with the Department of Justice, lest the ability of the Department of Justice to effectively investigate, and, if appropriate, prosecute, be impaired by public disclosure of matters in the course of investigation.

That is all.

Mr. SHEEHAN. Mr. Naisuler, I am interested in your comments on page 2, because during this course of time we have had people saying the profit is in the extruding, and not in the manufacture of aluminum.

Mr. NAISULER. You probably heard that from Don Wilmot, not the custom extruder.

Mr. SHEEHAN. The thing is, we are trying to find out just where the profits are in the industry here. I would assume from this that most of the profits, according to your opinion, are from the sale of the basic product?

Mr. NAISULER. We assume the profit of the aluminum industry is in the basic product and the mill product, such as pig ingot sheet, but it has been squeezed out of the extrusion business since the small extruder group. Oh, they left a profit in there while there were only a few of us. I was one of the first. We had a fine business, and in 1950 they squeezed us, and since then the squeeze has been coming tighter and tighter and tighter until there is nothing left to squeeze.

Mr. YATES. What do you mean by "squeeze"?

Mr. NAISULER. They kept raising the cost of our raw material, which only can come from the Big Three, and kept dropping the price of finished goods that we sell, custom extrusions. We have no other avenue to go down.

Mr. SHEEHAN. Who was the "they" who dropped the price?

Mr. NAISULER. The Big Three: Alcoa, Reynolds and Kaiser.

Mr. SHEEHAN. You mean you were competing with them on extrusion products?

Mr. NAISULER. That is right, they call on the same customers we do.

Mr. SHEEHAN. How many companies did you have in the extruding business in 1950?

Mr. NAISULER. I guess about, oh, around 30 to 40.

Mr. SHEEHAN. How many do you have today?

Mr. NAISULER. Over 100.

Mr. SHEEHAN. In other words, the industry is growing, despite the competition?

Mr. NAISULER. Yes, in spite of it.

Mr. SHEEHAN. Would you hazard a guess, as to these 100 companies in business last year, how many of them lost money?

Mr. NAISULER. For 1957 I do not know how many lost money.

Mr. SHEEHAN. Did your company lose money?

Mr. NAISULER. As a matter of fact, I do not think many of us really know yet, we have not filed our tax return.

Mr. SHEEHAN. They are due April 15, you better get on the job.

Mr. NAISULER. That is right. We usually get it in in the last week.

Mr. SHEEHAN. Did your company lose money last year?

Mr. NAISULER. I am of the suspicion that I have, but, until the final figure is in, I could not give a positive statement. I would not be a bit surprised that my extrusion business is losing money.

Mr. SHEEHAN. You mean it is now March and you do not know whether or not your company made or lost money last year?

Mr. NAISULER. Well, then, I will say I lost.

Mr. SHEEHAN. You are guessing, though?

Mr. NAISULER. Well, you did not want to accept the other guess. [Laughter.]

Mr. SHEEHAN. You are right. But you do not know where you are at?

Mr. NAISULER. You made the choice, actually.

Mr. SHEEHAN. All right. I assume that your organization has a representation here in Washington, do they?

Mr. NAISULER. What kind of representation?

Mr. SHEEHAN. You have legal talent here?

Mr. NAISULER. Yes, sir; he is sitting beside me. Leonard J. Emmerglick.

Mr. SHEEHAN. Leonard Emmerglick. I am sorry you did not identify him for the record. Is that the same gentleman that——

Mr. YATES. He is Mr. Naisuler's lawyer, and I assume, as his counsel, he would be willing to answer any questions.

Mr. EMMERGLICK. I have no objection, if I can.

Mr. SHEEHAN. Are you the same Mr. Emmerglick who endeavored back in 1955 or so—you were the first or second witness on the stand—to help the committee get a picture of the industry?

Mr. EMMERGLICK. Yes; I must plead guilty to that.

Mr. SHEEHAN. You are the gentleman. Did I understand properly; you are now the legal representative of these people here in Washington?

Mr. EMMERGLICK. That is correct.

Mr. SHEEHAN. Do you represent any other interests?

Mr. EMMERGLICK. Not in the aluminum industry.

Mr. SHEEHAN. Frankly, I heard some rumors that you were working with Harvey?

Mr. EMMERGLICK. That is not correct.

Mr. SHEEHAN. It is not correct. You were in the Department of Justice at one time, Mr. Emmerglick?

Mr. EMMERGLICK. That is right.

Mr. SHEEHAN. In other words, you people should have some expert representation here?

Mr. NAISULER. We think we have excellent representation.

Mr. SHEEHAN. Mr. Emmerglick, did you ever work with the committee here on getting out reports and information, outside of your official testimony?

Mr. EMMERGLICK. I did not.

Mr. SHEEHAN. Never have?

Mr. EMMERGLICK. Never have.

Mr. SHEEHAN. That is all, Mr. Chairman.

Mr. EMMERGLICK. I should say I was asked at one time to help the committee, and I found myself unable to do so, and I did not.

Mr. SHEEHAN. And you took no part whatsoever in advising or working for the committee?

Mr. EMMERGLICK. None whatever.

Mr. YATES. Mr. Multer.

Mr. MULTER. Does the same answer apply to anyone affiliated or associated with your law firm?

Mr. EMMERGLICK. I have no affiliates, so the same answer would apply.

Mr. MULTER. Any of your employees?

Mr. EMMERGLICK. I have no employees.

Mr. YATES. You do not even have a secretary?

Mr. EMMERGLICK. Well, no one who could, by any stretch of the imagination, be working with the committee. I have a personal secretary.

Mr. SHEEHAN. Are you associated with Mr. Dewey Anderson in any way?

Mr. EMMERGLICK. In no way.

Mr. SHEEHAN. As I remember, you and he both appeared the same day?

Mr. EMMERGLICK. I think that is correct.

Mr. YATES. I think someone from the aluminum company did.

Mr. EMMERGLICK. Is the committee now investigating me, may I ask? [Laughter.]

Mr. SHEEHAN. I was.

Mr. YATES. Mr. Sheehan says he was. I was not aware that the committee was.

Mr. EMMERGLICK. I feel flattered.

Mr. MULTER. I will tell you what I have in mind, Mr. Naisuler or Mr. Emmerglick. This seems rather a strange situation. If I recall correctly, the Aluminum Extruders counsel was in before this committee on many occasions and supplied us much valuable information with reference to this industry, as a result of which the committee became considerably active in this field. And I think he has done a pretty good job thus far in trying to point up the situation as it affects small business in this industry.

And, after that, it now appears that you made a complaint to the Department of Justice, which is under consideration. Now you ask leave not to give us any information because of that proceeding pending there. And we, practically, on the basis of the information you gave to us, made a record under which the Department of Justice has now gotten itself interested. Now you say, "Do not ask us for any information until we get through."

Mr. NAISULER. May I answer that?

Mr. MULTER. Please.

Mr. NAISULER. Before we thought we were dealing—in dealing with the committee—we were dealing, so to speak, with the civilian arm of Government, and we look upon this situation as if there has been a crime committed and the Justice Department is the place to go for complaints about crimes. It seems this is the legislative department, and we come here for change in legislation. We feel there has been a crime committed, and that is why we have gone to the Justice Department.

Mr. MULTER. You do not think legislation is necessary; the legislation is all right as it is?

Mr. NAISULER. I would not try to tell you what to do about legislation; that is for your own decision.

Mr. MULTER. The only reason we ask you gentlemen to come in here is to tell us what we can do legislatively.

Mr. NAISULER. We feel there is a violation of existing law, and we feel the remedy is through the existing law.

Mr. MULTER. Did your men feel that before you came in and told this committee the story in reference to this matter?

Mr. NAISULER. What year are you referring to?

Mr. MULTER. When did Mr. Lemelman represent your association?

Mr. NAISULER. He is not with us now.

Mr. MULTER. He was your executive director?

Mr. NAISULER. Executive secretary.

Mr. MULTER. If I recall correctly, he spent a great deal of time down here, particularly with members of the committee, supplying us with information.

Mr. NAISULER. I do not know what his reasons were for not testifying or not giving you information similar to what I am giving you. I cannot control him; I was not with him.

Mr. MULTER. He was acting for the same association you are acting for.

Mr. NAISULER. But if you will look back in your records, I submitted personally, in 1955, to this committee, a tremendous amount of information. And I think I said the same thing then as I am saying now: that we are being squeezed—we were being squeezed then. The only reason we were not squeezed out then was that shortages came up to save us.

Now, I cannot see a shortage to save us.

Mr. MULTER. At the time, you came down and told us about the price squeeze and other squeezes and the situation of the industry, and laid before us all the facts that were available to you so that we could try to do something about the industry.

Today, you say: Do not go into this because there is a proceeding pending in the Department of Justice.

If the information you may have to give to us will point a finger at anyone, and indicate a violation or crime, we do not want to take it in public hearing. Many times we take it in executive session.

Would it make any difference if we gave you an executive session? Would you then give us the information you refuse to give us now, because the Department of Justice is looking into the matter?

Mr. NAISULER. The only reason we do not want to give it is that we may be interfering with what the Department of Justice is doing.

We want to give it to you now; but, after all, if it does nullify the work we have done so far, that responsibility will be on your hands.

Mr. MULTER. But we cannot act if we do not get the facts.

Let me call this to your attention:

Last year, while there was a proceeding pending, which is still pending in the Federal Trade Commission, some people came in and testified before the Small Business Committee about a very serious antitrust situation. We developed all the facts, we thought, in executive session. [Laughter.]

You see, one of the columnists carried the whole story in his nationwide syndicated column, even though the testimony is still sealed.

If you give that a reason, you did not want to testify in executive session, we will excuse you in a minute.

What I want to mention is this:

At that time, while the proceeding was pending, and is still pending, as a result of the activities of this committee, we got the Department of Commerce, and the State Department, to intercede, and I think we broke up effectively two foreign cartels: one in Japan and one in Europe, as a result of which there is at least free competitive bidding in that field now.

Maybe if you give us the information, we can do something in this field.

Mr. NAISULER. Well, I have no objection to giving you the information now, but the responsibility has to rest with you: that if it ever gets out in any way to nullify the work of the Department of Justice—I do not want to carry that responsibility.

Mr. MULTER. All right. I think the committee will take that under advisement, as to whether or not we should ask you to attend an

executive session and give us that additional information—having in mind that executive sessions cannot be effectively sealed.

Mr. SHEEHAN. Well, is not this position similar to what we were in several years ago when Mr. Emmerglick was testifying before this committee?

He was talking about the Alcoa case, giving a lot of particulars and recommendations to the committee, and at the same time Alcoa was before the court for renewal of the 5-year under the court rule.

Mr. NAISULER. I am not qualified to answer that. I did not study the situation.

Mr. SHEEHAN. That question should have been directed to Mr. Emmerglick.

Mr. EMMERGLICK. Mr. Sheehan, I do not see the parallel. I was speaking then as an individual citizen about a case which was pending in court.

Mr. Naisuler has just been speaking about a complaint which has been made to the Department of Justice, alleging that a law has been violated.

It may be that the FBI is out investigating that now. Mr. Naisuler feels that unless the committee is warned before he is asked to give details as to the nature of that complaint, the committee may proceed to interrogate him and may elicit facts which are in the course of investigation by a law-enforcement agency.

Just so that the committee realizes that, he is expressing his willingness to answer any questions, not necessarily in executive session but in open session now.

Mr. SHEEHAN. On that basis, I should—or you, as attorney—I suppose you get paid for that; I do not—advise your client that we have had executive sessions around here and that columnists have gotten the news and have gotten it out in spite of the fact that it is supposed to be kept quiet in the executive session.

Mr. YATES. Not out of this subcommittee.

Mr. SHEEHAN. Out of the whole committee.

Mr. NAISULER. We are willing to make the statements in open session. Any questions that the committee wishes to ask, we will answer. We have now made the point that this matter is under investigation, and that is all we wanted to do.

Mr. SHEEHAN. I have no further questions.

Mr. YATES. Any questions?

(No response.)

Mr. YATES. If there are no further questions, Mr. Naisuler, you are excused.

I thank you, Mr. Naisuler, and Mr. Emmerglick, for coming in.

The committee will stand in recess until 10 o'clock tomorrow morning in this room.

(Thereupon, at 4:15 p. m., the subcommittee recessed to reconvene at 10 a. m., on Thursday, March 13, 1958.)

ALUMINUM INDUSTRY

THURSDAY, MARCH 13, 1958

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE
No. 3 ON MINERALS AND RAW MATERIALS OF THE
SELECT COMMITTEE TO CONDUCT A STUDY AND
INVESTIGATION OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10:05 a. m., in room 1334 New House Office Building, Hon. Sidney H. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding), Sheehan, and Riehlman.

Also present: Irving Maness, counsel; Bert Z. Goodwin, special assistant counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

PROCEEDINGS

Mr. YATES. The committee will come to order.

We are pleased today to have two newcomers to our aluminum hearings, the Anaconda Co. and the Olin Mathieson Chemical Corp.

Our first witness is Mr. C. Jay Parkinson, general counsel of the Anaconda Co., and vice president of the Anaconda Aluminum Co.

Mr. Parkinson, will you proceed.

TESTIMONY OF C. JAY PARKINSON, GENERAL COUNSEL OF THE ANACONDA CO., AND VICE PRESIDENT OF ANACONDA ALUMINUM CO.

Mr. PARKINSON. With your permission, Mr. Chairman, I would like to read my statement which has previously been submitted to the committee.

Mr. Chairman and gentlemen of the committee, my name is C. Jay Parkinson. I am general counsel of the Anaconda Co. and vice president of its wholly owned subsidiary Anaconda Aluminum Co. My office is located at the home office of said companies, 25 Broadway, New York 4, N. Y.

The Anaconda Co. first became interested in the aluminum business in 1914 when the metallurgical research department was assigned the task of determining whether metallurgical-grade alumina could be produced economically from smelter slimes available at the Anaconda, Mont., smelter. As a result of this work the clays in the Northwest, particularly south of Spokane, Wash., were investigated because of their low iron content. Some clay lands were leased and considerable research was performed on these materials at a small pilot plant.

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Preliminary investigation was also made looking toward the building of an aluminum reduction plant in western Montana to utilize waterpower from that area. This project did not materialize at that time, largely because of adverse economic conditions which developed at the end of and following World War I. Out of the needs of World War II our research was again revised as the result of the inspiration and work of Mr. Frederick Laist, vice president of metallurgical operations.

This research had progressed to a point that by the time we did decide to engage in the primary production of aluminum in the early 1950's we were encouraged with the laboratory results in using domestic clays to produce alumina. Since the reduction plant at Columbia Falls, Mont., was brought into operation during August 1955, and had reached its rated capacity of 5,000 tons of metal per month by December of that year, we have continued our research work and will shortly have in operation at Anaconda, Mont., a large pilot plant operation, costing over $1 million, designed to test construction materials, operating procedures, and to otherwise confirm the factors necessary before a commercial size plant can be constructed to supply, from domestic clays, our alumina requirements and possibly others as well. Patent applications are pending on the novelty aspects of this work.

We believe we are successfully nearing the end of a long, expensive and difficult project. It is our judgment that a domestic source material for economic production of alumina in reasonable proximity to the Northwest primary producing area is of great importance in insuring the future defense and peacetime requirements for this vital metal. This becomes even more important as our domestic bauxite deposits continue to diminish and we have to stretch out to far continents for a supply of acceptable grade bauxite to meet increasing future demands. The domestic supply of clay and other materials amendable to treatment into acceptable alumina is almost inexhaustible.

The stimulus of the results of our work along these lines is becoming more evident as other companies are beginning to join in research and development of various domestic source materials. The most recent announcement called to my attention appeared in the Wall Street Journal under date of February 12, 1958, wherein Strategic Materials Corp. and North American Coal Co. announced plans for a commercial scale plant to be constructed in southeastern Ohio to recover alumina from low-grade coal ores and waste clays.

During 1951 the Harvey Machine Co., Inc., a California corporation, had been negotiating with various United States Government agencies for the construction and financing of an aluminum reduction plant to be built near the Hungry Horse power development in Flathead County, Mont., and had caused to be incorporated a subsidiary company, Harvey Machine Co., Inc., of Montana, to construct and operate such plant.

The California corporation and the various Government agencies were unable to conclude arrangements satisfactory to that corporation. The California corporation then entered into negotiations with the Anaconda Co. which resulted in an agreement whereby Anaconda acquired a 95 percent stock interest in the Montana corporation, to which were transferred certain of the rights, assets and commitments of the

California corporation relating to the proposed plant and Anaconda undertook to finance and complete the construction thereof, subject to certain conditions the most important of which were the issuance of a certificate of necessity, the making of a satisfactory long-term power contract with Bonneville Power Administration and the securing of a contract with a responsible supplier for alumina requirements for the plant.

These conditions were satisfactorily negotiated and resolved in 1952. The California corporation retained a 5 percent stock interest in the Montana corporation which minority stock interest was purchased by the Anaconda Co. in April 1957. The name of the Montana corporation was changed to "Anaconda Aluminum Co." under which name it continues to operate.

The certificate of necessity for the reduction plant provided for a 5-year amortization of 85 percent of the total capital expenditure which amounted to approximately $63 million. The Anaconda Co. provided all of the capital for the construction and operation of this plant. The Anaconda Aluminum Co. has no supply or "put" contracts with the United States Government and received no aids from the Government other than the aforesaid certificate of necessity.

A contract for the purchase of power was concluded with the Bonneville Power Administration for a term of 20 years providing for 111,000 kilowatts of firm power and up to 37,000 kilowatts of interruptible power.

A requirements contract for alumina was made with Reynolds Metals Co. which terminates on December 1, 1960. Arrangements have also been made at the expiration of this contract to obtain alumina under a contract from Kaiser Aluminum & Chemical Corp. on more favorable terms than under the Reynolds contract.

Pursuant to this latter agreement Anaconda Aluminum Co. has advanced to Kaiser a total of $17 million to provide in part for the construction costs of additional facilities at Kaiser's alumina plant at Gramercy, La. An agreed credit on the per ton price of alumina delivered will liquidate these advances.

This contract assures alumina to the Anaconda Aluminum Co. for a minimum period of 12 years and a maximum of 15 years. By virtue of our purchase of alumina rather than producing our own from bauxite or clay, we are at a competitive cost disadvantage in comparison with the other primary aluminum producers. Consequently, we are hopeful that this disadvantage can be minimized when we are in a position to produce our alumina requirements from domestic materials.

In 1955 the American Brass Co., Torrington division, a wholly owned subsidiary of the Anaconda Co., completed a new electronically operated four-high reversing mill in Torrington, Conn., for producing aluminum and aluminum alloy sheets in coils up to 30 inches in width. This installation has a capacity of approximately 800,000 pounds per month but has not to date reached that capacity. Also in 1955, preliminary construction work was started and major equipment was ordered for a new aluminum mill at Terre Haute, Ind. This mill is designed to produce aluminum sheet, plate, rod, tube, and extrusions and will be substantially completed during the last quarter of 1958.

In 1957 Anaconda was approached by the Cochran Foil Co., a manufacturer of aluminum foil, laminated foil products, and rigid aluminum containers with headquarters in Louisville, Ky., which company was seeking to diversify its investments in the aluminum business and to arrange for a long-term assured supply of raw material for its plants. As a result of this investigation and the negotiations pursuant thereto throughout the fall months of 1957, an offer was made to acquire all of the properties and assets of Cochran Foil Co. This offer in the form of an agreement and plan of reorganization provides for the acquisition of all of Cochran Foil Co.'s assets and properties by a newly organized and wholly owned subsidiary, namely Cochran Foil Corp., in consideration of 305,436 shares of the Anaconda Co.'s stock.

This offer was accepted by the shareholders of Cochran Foil Co. at a special meeting held on December 20, 1957. The completion of this acquisition will afford an immediate market for aluminum from the Terre Haute plant when it comes into production as well as assuring a more diversified outlet for production from the Columbia Falls plant.

The Anaconda Wire & Cable Co. is the other major fabricating subsidiary of the Anaconda Co. Anaconda owns 70.63 percent of the capital stock of Anaconda Wire & Cable Co. The Wire & Cable Co. has for several years been engaged in the business of manufacturing aluminum wire. It operates a new semiautomatic aluminum rod rolling mill at Great Falls, Mont., which supplies the requirements of all of the company's plants for aluminum rods. This company has provided facilities in several of its plants for the manufacture of aluminum conductors used in the transmission and distribution of electricity.

All sales of primary aluminum are made through the Anaconda Sales Co., a wholly owned metals sales subsidiary of the Anaconda Co., on the basis of both "spot" orders and long-term contracts, all of which specify the sales price as that prevailing on the date of shipment as published in the American Metal Market. An aggressive attempt has been made to develop sales for aluminum metal with all consumers, including particularly nonintegrated consumers. For the years 1956 and 1957 shipments to customers may be summarized as follows:

Primary metal shipped to customers, calendar year 1956

	Percent	Total pounds
Anaconda subsidiaries	32.3	39,596,276
Nonintegrated and sundry customers	67.7	82,923,536
Total	100.0	122,519,812

NOTE.—In 1956 the Columbia Falls plant produced 123,293,817 pounds (61,647 tons) of primary metal which amounts to approximately 4 percent of total domestic production.

Primary metal shipped to customers, calendar year 1957

	Percent	Total pounds
Anaconda subsidiaries	34.6	34,680,068
Nonintegrated and sundry customers	65.4	65,433,197
Total	100.0	100,113,265

In 1957 the reduction plant at Columbia Falls produced 104,111,903 pounds of primary aluminum. The plant operated on a full schedule until June 1, 1957, at which time, because of a surplus of finished metal in inventory, production was curtailed 12½ percent with an additional 12½ percent curtailment on July 1.

Production continued thereafter for the balance of the year at an average rate of 7,550,000 pounds per month, or 75 percent of plant capacity. Beginning on January 1, 1958, a portion of this curtailment was restored to yield production approximating 88 percent of capacity. All of the sales aforesaid were made in the form of pig, wire ingot, and sheet ingot. Consequently, we do not currently compete with extruders, casters of alloys, or foundry ingot. Our reclaimed scrap handling is limited to remelting of Anaconda Wire & Cable Co.'s rods and clean aluminum wire; hence, we do not compete with secondary smelters on scrap purchases. We have no hot-metal contracts, as we have previously advised this committee in writing.

With our new fabricating facilities that will begin to take metal in 1958 and early 1959, plus the growth of sales of aluminum products by our already operating fabrication plants, I would expect, and sincerely hope, that more of our primary metal production will be utilized by our fabricating plants than has been possible to date and that we will be able to resume full production in the near future. The extent of this use will depend upon markets and sales, but we do expect a reasonable growth. At the same time we are actively and aggressively promoting the sales of prime metal to nonintegrated consumers and are continuing to offer term contracts and to accept spot orders.

We have no present plans to increase our productive capacity at Columbia Falls, though we have all of the essentials to do so except for additional power and the necessary market demands. Plans are in process or are under study to alleviate the power shortage in the Northwest. Thus, Anaconda Aluminum Co. is in a good position to increase its metal production if economic conditions warrant such action.

We do not believe that there is likely to be an appreciable further replacement of copper by aluminum in the foreseeable future. The principal replacements in transmission lines, hardware and certain other items where lightness is advantageous have already taken place.

During the past 10 years it is estimated that total potential of copper has been decreased by approximately 12 percent by such replacement. Copper is again in plentiful supply as are other competitive metals, so that there is less likelihood of substitutions based on scarcity or price. Under these circumstances the measure of a metal's use in the future will depend upon its qualities for particular requirements and purposes.

The role of aluminum in the past decade has truly been sensational but no doubt seems much more so when compared with the older metals, the uses for which have been developing ever since the advent of the bronze age and not confined to the last decade or two as has been the case with aluminum. With supply and prices of metals in competitive alinement, whichever metal or alloy is superior or better for a given use will be controlling.

Aluminum had been in short supply for a number of years prior to 1957. The United States has been and still is a net importer of the

primary metal. Most of the aluminum imports into this country have been supplied by Canada which country has also been the principal exporter into other markets of the world.

Aluminum is now in more plentiful supply and is being offered more freely in European markets and by sources which heretofore did not place much aluminum in those markets. Russia, Japan, and Yugoslavia are offering aluminum, and generally, at reduced prices. United States domestic aluminum is also now being offered in European markets.

The prices at which some of this foreign-produced aluminum has been offered would permit the import of the metal from these sources into the United States for sale here below the current domestic price after payment of freight and duties. However, it is not likely that aluminum from these sources will offer serious competition to the domestic aluminum produced in this country principally because, if we omit Russia, the volume available is relatively small. The principal competition of domestic aluminum in the United States markets is, of course, from Canada.

In regard to the amount of metal which Russia might be able to offer, we can only speculate, as accurate figures about Russian capacity are not available. However, on the basis of information which is available, it is not likely that the volume available from Russia will provide any protracted competition in the near future with domestic aluminum in the United States.

In regard to fabricated aluminum, our exports and imports are relatively small and are about in balance. The demand for aluminum in Europe is still high and we do not believe that the prospects of competition from foreign fabricated aluminum will be serious in the immediate or near future.

The short-term outlook for the industry will be affected adversely by the extent of the current recession in general business activity which was not foreseen by forecasters in 1956 and early 1957. It would appear, however, that barring unforeseen and unpredictable events, the current oversupply of metal will even up with consumption progressively between now and 1960 and that we may well require additional productive capacity to adequately supply requirements in the early 1960's. I am personally optimistic concerning the future of the aluminum industry. This optimism is based, among other things, upon—

(1) The population growth forecasts during the next decade;

(2) Adequate metal supply availability which will tend to promote new products and uses and to expand sales in conventional markets;

(3) The relative stability of prices for primary aluminum metal and most semifabricated products; and

(4) The controlled attention of management in all branches of the industry to all elements of product sales based by a comprehensive research and development program.

It seems practically certain that the consumption of aluminum throughout the world will be exceeded only by steel. The expansion of production, however, will continue to be controlled and even limited by the availability of cheap power. Nuclear power developments in the future can very well develop aluminum metal production in countries which today are large aluminum importers.

Mr. YATES. Mr. Parkinson, thank you very much for a fine statement. The committee is very interested in what you have to say. I know that I personally am interested in this clay experiment that your company has undertaken.

How close to usability is that clay?

Mr. PARKINSON. The very large plant that is presently under construction at the research center at Anaconda, Mont., metallurgical research center, the first phase of that will be completed and in operation approximately April 1 of this year.

The second phase of the operation will be completed, under present plans, by approximately June 1 of this year, and be in operation at that time.

Mr. YATES. Have you produced aluminum by using that clay? That clay is a substitute for alumina, is it not?

Mr. PARKINSON. That is right. I am sorry. The clay is a substitute for bauxite.

Mr. YATES. And then you produced alumina from it?

Mr. PARKINSON. That is correct.

Mr. YATES. And from the alumina you produce aluminum?

Mr. PARKINSON. That is right.

Mr. YATES. Have you produced aluminum by using the clay?

Mr. PARKINSON. Not on a regular scale. We have had for some time a small laboratory plant which would handle a very small tonnage of clay each day. By running that over a period of weeks or months, you can accumulate, and we have, sufficient alumina to make a test in the plant at Columbia Falls, actually in a cell. And it works equally well with the material, the alumina that we buy commercially for that purpose.

In other words, it is the equivalent of it.

Mr. YATES. When will you be in a position to use that on a mass-production basis?

Mr. PARKINSON. It appears likely that it would be necessary to operate the complete plant for perhaps a year or longer to test out the types of materials for machinery, equipment, lines, and tanks, that would be best utilized in the construction of a large-scale commercial plant.

It is impossible for us to say at this stage how long we might have to operate that pilot plant in order to test out all of the various aspects of the proposition, but it would now appear, from the work that has been done, that that that could be completed in approximately a year to 2 years.

Mr. YATES. Do you know yet whether your cost in using the clay will compare favorably with what it costs to purchase alumina? You do not have your own bauxite plant, do you?

Mr. PARKINSON. No, we purchase our alumina.

Mr. YATES. Will the costs compare favorably with the alumina purchased?

Mr. PARKINSON. We believe that we will be able to furnish alumina from clay to our plant at Columbia Falls and in that area at a price less than it can be purchased from others, and comparable with costs of producing the same material from bauxite if we had it available.

Mr. YATES. You have moved into the sale of primary aluminum fairly substantially, as I remember the figures. The indications are that you are going to move into the field primarily. Do you sell primary metal at a profit now?

Mr. PARKINSON. Yes, we do.

Mr. YATES. When we speak of primary metal, we refer to the aluminum as ordinarily sold as pig and ingot. That is sold in accordance with the public price?

Mr. PARKINSON. Yes.

Mr. YATES. That is what you mean?

Mr. PARKINSON. That is correct.

Mr. YATES. Do you sell in countries other than the United States?

Mr. PARKINSON. No, we have not sold except in the United States. I believe we have one small order in South America, and we sold, I believe, two small orders in Mexico City.

Mr. YATES. What did you sell?

Mr. PARKINSON. Primary metal.

Mr. YATES. At what price do you sell for outside the United States?

Mr. PARKINSON. We have sold our metal at the same price that the other aluminum companies have been charging in those areas.

Mr. YATES. Is there a published price in Mexico?

Mr. PARKINSON. There is an offered price in Mexico for aluminum from both United States producers as well as Alcan in Canada.

Mr. YATES. Is this a published price?

Mr. PARKINSON. No. I do not think there is a published price. It is an offered price, it is what price they offer to sell for down there.

Mr. YATES. How does the public know what the offered price is down there? Suppose a buyer of aluminum, a prospective buyer of aluminum, wanted to know the price. Would he go to the company?

Mr. PARKINSON. I think that is what happened. I am not familiar with the details of the sale. It was a small sale, I think just more or less an experimental sale, and I am not familiar with the details of it.

Mr. YATES. He would not go to a journal like the American Metal Market such as we have in this country, where the prices are listed? You do not have such a situation in Mexico?

Mr. PARKINSON. My understanding is that they do not have that in Mexico City.

Mr. YATES. How do you fix your price, then? Do you call up and find out what the others are charging?

Mr. PARKINSON. I think all of those small orders have been on a bid basis, in other words, an asking price, we have quited a price, others have quoted a price, and if the price is close, they have divided the business a little and given us small orders.

Actually, we haven't attempted to promote any sales outside the United States. There have been, I think, just 2 or 3 instances where we, in effect, have gotten a small order in that fashion.

Mr. YATES. This was in Mexico?

Mr. PARKINSON. In Mexico. I do not think we have actually delivered an order outside of the United States except to Mexico.

Mr. YATES. Do you recall what price was charged there?

Mr. PARKINSON. No, I do not. I do not have those details.

Mr. YATES. Could you supply those for the record?

Mr. PARKINSON. Yes, I would be glad to.

(See letter dated April 14, 1958, from C. Jay Parkinson, General Counsel, the Anaconda Co., in appendix, p. 441.)

Mr. YATES. I was a little bit surprised to learn that you have purchased a certificate of amortization. I was not aware that certificates of amortization could be transferred.

Mr. PARKINSON. We did not purchase it. It was one of the conditions of our taking over the commitments of Harvey, the arrangement of a satisfactory certificate, and that was subsequently worked out. It was not a purchase; we did not purchase the certificate.

Mr. YATES. How was that done? I remember we were advised that the certificate of amortization was granted to the Harvey Co. Harvey transferred it to you either through a sale at the corporation—how was it done? I am interested in the form in which it was transferred from the Harvey Co. to your company.

Mr. PARKINSON. The details of that I do not have available. But my understanding was that the certificate of necessity ran to the Harvey, Mont., corporation, and that Anaconda, of course, acquired 95 percent of the stock of that corporation from the Harvey interests, you see. And there were negotiations that took place to change that original certificate in some respects. I think that the amount of the certificate, the aggregate amount of construction was fixed at that time at this $63 million.

(See letter dated April 14, 1958, from C. Jay Parkinson, General Counsel, the Anaconda Co., in appendix, p. 441.)

Mr. YATES. Perhaps the confusion lies in my interpretation of your statement on page 4, where it is said:

> The California corporation then entered into negotiations with the Anaconda Co. which resulted in an agreement whereby Anaconda acquired a 95 percent stock interest in the Montana corporation, to which were transferred certain of the rights, assest and commitments of the California corporation relating to the proposed plant, and Anaconda undertook to finance and complete the construction thereof, subject to certain conditions, the most important of which were the issuance of a certificate of necessity, the making of a satisfactory long-term power contract—

and so forth.

Mr. PARKINSON. Yes.

Mr. YATES. When I first read that I received the impression that the certificate had been transferred from the California corporation, but apparently I am reading something into it.

Mr. PARKINSON. I think so. I think what actually took place and the things that we are talking about is that there had been negotiations with respect to power, there has been land acquisitions for plant site, there had been machinery ordered. For instance, there has been electrical equipment ordered and that was in process, various assets, and engineering plans which were in process at that time.

Mr. YATES. Then you took over 95 percent of Harvey of Montana?

Mr. PARKINSON. That is correct.

Mr. YATES. Including the certificate of necessity?

Mr. PARKINSON. That is correct.

Mr. YATES. And then subsequently you bought the remaining 5 percent?

Mr. PARKINSON. That is correct.

Mr. YATES. Can you tell us what the consideration was for that deal? Did Harvey receive anything in addition to a sum of money? I mean, did it receive an agreement on your part to furnish aluminum to that company?

Mr. PARKINSON. Yes. The Harvey Co. in California received 5 percent of the stock, a call on the Columbia Falls plant for up to 25 percent of the production from that plant——

Mr. YATES. For how long a period of time?

Mr. PARKINSON. I am not sure when the date ended, but for approximately 10 years.

Mr. YATES. And when you bought out the remaining 5 percent interest of Harvey, did it still retain its call rights?

Mr. PARKINSON. No, it did not, because by that time the Harvey Co. had made arrangements to build a plant at The Dalles in the Northwest to produce what it considered its own aluminum requirements.

Mr. YATES. Did it receive an additional certificate of amortization for the construction of its plant at The Dalles?

Mr. PARKINSON. That I do not know what it received; I have nothin to do with that company.

Mr. YATES. I think you and I will be surprised if they did not receive one.

Mr. PARKINSON. I would, yes.

Mr. YATES. I think Harvey Aluminum will be in here in a few weeks, and I think we can find out then.

Mr. PARKINSON. I think that is the best source of that information.

Mr. YATES. I agree. So that you have no contractual arrangements with Harvey at all now?

Mr. PARKINSON. None whatsoever.

Mr. YATES. And they purchase aluminum from your company if they want aluminum from your company on the same basis as any other customer?

Mr. PARKINSON. That is right.

Mr. YATES. On page 5 you state:

The Anaconda Aluminum Co. has no supply or "put" contracts with the United States Government and received no aids from the Government other than the aforesaid certificate of necessity.

There seems to be an overtone to that statement. Or am I reading something into it? Are there certain advantages that come from supply or put contracts?

Mr. PARKINSON. I would say there were, yes, in times when you cannot run your plant at capacity, if you can sell your aluminum to the Government, it is in oversupply, and run your plant at a hundred percent of capacity, obviously it is an advantage to you.

Mr. YATES. Can that be one reason why the price is at 26 cents today, do you think?

Mr. PARKINSON. No, I do not think that has anything much to do with the price being at 26 cents. The reason the price is at 26 cents is that it costs more for all of the materials and services that go into producing the metal, including transportation and overhead and everything.

Mr. YATES. Costs more than when?

Mr. PARKINSON. Than it did when aluminum sold at a lesser price.

Mr. YATES. Have you had occasion by any chance to check the statement of mill costs to which the committee previously referred as it appears in the case of *United States* v. *Aluminum Company of America* in 153 Federal Supplement, 132? The schedule appears on page 185.

Mr. PARKINSON. I am familiar with the case that you speak of, but I have no recollection of the mill costs.

Mr. YATES. There is a schedule of mill costs on page 185 of the three primary producers. I wonder whether or not Anaconda's mill costs approximate those that have been published for the three primary producers?

Mr. PARKINSON. I would not know that, sir. I do not know what those mill costs are.

Mr. YATES. Does somebody with your company know?

Mr. PARKINSON. Oh, yes, we know what our mill costs are. I do not knwo what other people's are.

Mr. YATES. You were not in business in 1956—yes, you were, were you not?

Mr. PARKINSON. Yes.

Mr. YATES. And you had mill costs. The question I asked was whether the mill costs of your aluminum company products met the mill costs of Alcoa, Reynolds, and Kaisers, as published in that case?

Mr. PARKINSON. And that I do not know, I am not able to tell you.

Mr. YATES. Could you supply that for the record, please?

(See letter dated April 14, 1958, from C. Jay Parkinson, general counsel, the Anaconda Co., appendix, p. 441.)

Mr. PARKINSON. I will see if we have that available.

Mr. YATES. The suggestion is made that perhaps the reason you do not furnish that information is that you do not know what the mill costs are in this book. I get the impression that at this time that you are not aware of what the mill costs are in this book.

Mr. PARKINSON. No, I do not have that at hand.

Mr. YATES. I think, too, we would like to know how substantially your mill costs have gone up since 1956. Is there a direct relationship between your costs and the published price? How did you happen to charge the public price for the sale of your primary metal?

Mr. PARKINSON. We are such a small factor in the business that we have simply sold it at the published price. We are not able to influence the price. We do not have enough production.

Mr. YATES. I asked Mr. Davis, when he was in before the committee, how it happened that he cut back production rather than cutting the price of the product. I would think you would get more business if you cut the price rather than production, would you not?

Mr. PARKINSON. No. You can sell just about so much aluminum and so much copper. In other words, you can sell what people will buy. We do not sell any more copper when the copper is 24 cents or 25 cents than when it is 30 or 35 cents.

Mr. YATES. Then price has no relationship?

Mr. PARKINSON. I would say if the price is excessive, if it goes beyond certain bounds, it would naturally affect sales to some extent, but not within any reasonable range. It is the stability of the price so that you can make plans now, engineering plans and designs, for furnishing that article 6 months, a year, or a year and a half from now, that is far more important than that.

Mr. YATES. Would you not think you would get more customers if you charged 25 cents than 26 cents?

Mr. PARKINSON. I do not think so. Would you buy any more aluminum products if the price was 25 cents instead of 26 cents?

Mr. YATES. If I were buying aluminum, I would certainly buy at 25 cents rather than 26 cents.

Mr. PARKINSON. Yes, but would you buy any more?

Mr. YATES. I might, depending on what my particular needs were. As you asked me this question, I am trying to picture myself in the aluminum business and using it. But certainly even in this time of depression, there are certain numbers of aluminum purchasers, otherwise the companies would have no sales at all, and you would have a cutback of capacity not by 20 percent but by 100 percent.

So that in your competition with the other companies, I assume that price is a factor in the current aluminum market.

Mr. PARKINSON. It hasn't become such in the prime metal market. I think it has to some extent in the fabricated articles.

Mr. YATES. Do you really know in the primary market?

Mr. PARKINSON. Pardon?

Mr. YATES. Do you really know whether it is a factor in the primary market? Who has tested it?

Mr. PARKINSON. We do not think it is—it has been tested in other metals, copper and——

Mr. YATES. Do you consider aluminum in the same class pricewise as the other metals?

Mr. PARKINSON. Oh, yes, as far as this principle that we are talking about here; in other words, I don't think that you would buy more aluminum if you were in the aluminum business if aluminum was at 25 cents than at 26 cents, you would buy simply what you could reasonably utilize; you wouldn't buy it just because it was cheap if you didn't have a use for it.

Mr. YATES. But if you were selling at 25 cents and the other companies were selling for 26 cents and I had a use for it, I would buy it from your company, wouldn't I?

Mr. PARKINSON. Yes, I guess so, unless there were other considerations involved. If you felt that one of the other suppliers had furnished you your requirements of metal in the past when metal was in short supply, you might decide that that is a more reliable source, or you got more benefit from doing business with them because of their research program, or for an infinite number of reasons. All metal isn't sold by the one that can necessarily furnish it at the lowest price.

Mr. YATES. In 1955 the price of copper was at a peak, wasn't it, as I remember?

Mr. PARKINSON. Yes.

Mr. YATES. The price of all metal had gone up?

Mr. PARKINSON. Yes.

Mr. YATES. The price of copper is not at that peak any longer?

Mr. PARKINSON. No.

Mr. YATES. Aluminum was at 22 cents, I believe, in 1955. I think there was a dispute between Mr. McConnell, of Reynolds, and myself as to whether it was 22 or 22½ cents at that time, but regardless of that fact, it is now 26 cents, and copper is way down. And we know that the demand for aluminum is much below what it was in 1955, yet the price is higher. I gather the impression from your answer a few moments ago that you thought that aluminum was like the other metals in having its peaks and valleys in accordance with supply and demand. Now, this would seem to negate that, wouldn't it?

Mr. PARKINSON. No, I think in time it will.

Mr. YATES. What?

Mr. PARKINSON. I think in time that aluminum will react pretty much the way the other metals do.

Mr. YATES. You mean it will go down?

Mr. PARKINSON. I don't know whether it will go down or whether it will go up.

Mr. YATES. Well, if it goes down, it will be going against history. As I remember the history of the price of aluminum, as it has been presented to this committee, I think it went down only once during the war, and since then it has had a gradual rise. But this isn't true of copper, it has had its peaks and valleys.

Mr. PARKINSON. That is correct. And I would say the same thing was likely to happen in the future with aluminum.

Mr. YATES. The range of aluminum peak prices, starting with 1950, when it hit 18 cents, has been progressively upward. In 1950 it was 18 cents; August 4, 1952, it was 19 cents; January 23, 1954, it was 19½; July 15, 1953, it was 20 cents; August 5, 1954, it was 20½ cents; and January 13, 1955, it was 21½ cents; August 1, 1955, it was 22½ cents; March 29, 1956, it was 24 cents; August 10, 1956, it was 25 cents; August 1, 1957, it was 26 cents. Does it follow the path of other metals—does aluminum follow the path of other metals price-wise?

Mr. PARKINSON. I think if you take a comparable period of time you can go back in most of the metals and find a period of that length when that same thing occurred. You certainly can in lead and zinc and copper. It is true that you have had a period in the last 20 years or so on aluminum that has been somewhat different than it has in copper and lead or zinc, but there are very good reasons for that.

Mr. RIEHLMAN. I wonder if aluminum isn't becoming a fast competitor to copper and other metals in the field of manufacturing?

Mr. PARKINSON. Oh, yes.

Mr. RIEHLMAN. Wouldn't that have some effect upon the price of copper, the greater use of aluminum and substituting its use for copper?

Mr. PARKINSON. Yes, I would say it would be a factor.

Mr. RIEHLMAN. Well, can you give us any idea as to what effect it has had so far. You are in the copper business.

Mr. PARKINSON. I think I indicated to you that the best study that we were able to make would indicate that aluminum has cut the potential of copper approximately 12 percent. On the other hand, there are many new uses developing for copper.

What we are headed for with the research that is going on in all these fields is something I couldn't possibly predict.

Mr. RIEHLMAN. To what degree has this increase affected the price of copper?

Mr. PARKINSON. Which increase?

Mr. RIEHLMAN. The increase in the use of aluminum.

Mr. PARKINSON. I don't think very much. I think it has been a small factor to date.

Mr. RIEHLMAN. What is the price of copper today?

Mr. PARKINSON. The price of copper from the primary producers in the United States is 25 cents, 23 cents for the custom smelter price, and the LME price in London is approximately 21 cents today.

Mr. RIEHLMAN. Do you have an idea of what it was a year ago?

Mr. PARKINSON. Well, I don't have it in mind, no; I couldn't quote what it was exactly a year ago.

Mr. RIEHLMAN. Counsel advises me, or at least he thinks that he recalls, that in 1955 there was some such a price as 65 cents a pound for copper. Do you have any idea of the factors that caused the price to be that high?

Mr. PARKINSON. I don't know anything about the 65 cents.

Mr. DALMAS. What was the world price in 1955?

Mr. PARKINSON. In 1955 the highest price that the domestic market got, I think, was 46 cents. No copper was sold over that that I am aware of in the domestic market. What it went for in the European market, because it was in short supply, it was at various premium prices, and I have no doubt that somebody might have paid 65 cents for some copper, and maybe somebody paid more than that, I don't know.

Mr. YATES. Does your company ordinarily charge what your competitors are charging for the products that you sell?

Mr. PARKINSON. That is right.

Mr. YATES. I have seen that in many apsects of the metal business, and I wonder why this is competitive rather than being noncompetitive. It seems to me that a competitive price would be one which seeks to be below the level of the price your competitors charge?

Mr. PARKINSON. I think the factors that go into cost and marketing for almost everybody are somewhat the same, I mean you can't make—you couldn't make aluminum and sell it for very much below the market and stay in business. That is the factor, I think, that makes most things that are sold in an industry to be sold at a price.

Mr. YATES. Apparently the cost of making pig—and this of course is subject to some consideration—the cost of making pig on that theory is almost exact, your costs for making pig if they come out at about the same sales price would be about the same as other companies, and we know that it can't be true, because you are buying aluminum from other companies rather than making it from your own bauxite?

Mr. PARKINSON. There are times when you have factors so that your profit margin isn't as much as it should be. You are not able to buy your raw materials at as cheap a price as somebody else. However, you work on that to try to ultimately buy those at a competitive price, so you can be competitive.

Mr. YATES. Did your company check to see whether there is bauxite available?

Mr. PARKINSON. Oh, yes.

Mr. YATES. Is there none available?

Mr. PARKINSON. Oh, yes. We have had bauxite deposits tied up ourselves.

Mr. YATES. Why do you buy aluminum rather than using the bauxite?

Mr. PARKINSON. Because the construction of an aluminum plant to supply the requirements for a 60,000 electrolytic plant like we have at Columbia Falls isn't economic, No. 1. No. 2 is that in order to develop in some of these inaccessible places one of these bauxite deposits which require railroads, ships, loading and unloading facilities, just isn't economic for our operation at the present time. And our work, as I have related, since 1914 has progressed to the point

that we believe there is a good chance that the approach we have made in the conversion of domestic clays to alumina to be perhaps the best approach for our company.

Mr. YATES. How much does it cost—how much would it cost to construct the type of plant and the facilities that you say would be necessary in order to convert bauxite to alumina, so that it could be used in your primary process, how much of an investment would that require?

Mr. PARKINSON. You mean a plant large enough to supply alumina, 20,000 of alumina, to our plant?

Mr. YATES. Yes. Of what order would that be?

Mr. PARKINSON. I would say somewhere around $30 million or better, possibly more today.

Mr. YATES. Has your company found it more convenient more feasible to loan $17 million to Kaiser to obtain rights for alumina rather than making an investment for your own plant?

Mr. PARKINSON. Yes, particularly inasmuch as we had the investment in this clay to alumina, which will come in for the future. And the only way that we could get alumina for our plant at the termination of the Reynolds agreement was to supply money to somebody in the alumina business to increase the planned capacity of their plant to an extent so that they could furnish their own requirements plus that our requirements were.

Mr. YATES. What is a long-term contract as you use it on page 8? You say—

> All sales of primary aluminum are made through the Anaconda Sales Co., a wholly owned subsidiary, on the basis of spot orders and long-term contracts, all of which specify the sales price as that prevailing on the date of shipment as published in the American Metal Market.

What are long-term contracts?

Mr. PARKINSON. A long-term contract as used there is anything from 6 months up, in other words, for a year, 2 years, 3 years, 4 years.

Mr. YATES. Do you have such long-term contract with customers now?

Mr. PARKINSON. Oh, yes.

Mr. YATES. With any small business firms?

Mr. PARKINSON. Oh, yes.

Mr. YATES. Have you broken down your customers as some of the other companies which have testified before us have done in terms of what they would qualify as small business? Can you tell us which of your customers, what portions of your sales goes to small business?

Mr. PARKINSON. No, I haven't that information.

(See letter dated April 14, 1958, from C. Jay Parkinson, general counsel, the Anaconda Co., appendix, p. 441.)

Mr. YATES. When you say that you do have long-term contracts with small business, what small businesses do you have such long-term contracts with?

Mr. PARKINSON. I wouldn't be prepared to tell you that.

Mr. YATES. The reason that we are inquiring is that we have heard from other manufacturers that they don't enter into long-term contracts with small-business people, not because they don't want to enter into them, but because the small-business people don't enter into long-term contracts. That is why I thought this was a unique situation.

Mr. PARKINSON. No, I think that that isn't exactly a fact, and perhaps I have misstated it. Normally the very smalest business, the smaller orders do come in as spot orders, or just orders for a short term. I think our longer contracts are with larger companies, larger fabricators. I haven't the list, I haven't gone over it for some time, I mean those vary and change from time to time. We are in business of selling aluminum, if they want a long-term contract we would be happy to furnish them one.

Mr. YATES. You refer to a nonintegrated customer. What does that mean, on page 9?

Mr. PARKINSON. Customers other than those who are producers of primary metal.

Mr. YATES. Customers other than what?

Mr. PARKINSON. Customers who do not have any primary metal production—or fabricators.

Mr. YATES. Does that mean that you sell to the other primary producers?

Mr. PARKINSON. No.

Mr. YATES. Then all of your customers will be nonintegrated, will they not, under that definition?

Mr. PARKINSON. That is right.

Mr. YATES. That is why I wondered about the distinction you draw between nonintegrated and sundry customers. What is the distinction between a nonintegrated and a sundry customer?

Mr. PARKINSON. I have never been clear in my mind what nonintegrated exactly meant as used in the various reports that this committee has published. I had assumed that nonintegrated meant those who were not primary metal producers. The sundry customers; we have had customers where we have—well, for example, who have required a particular article from one of our fabricating plants and so on, and we have furnished that; that is what that has reference to.

Mr. YATES. Well, all of your customers, then, are sundry customers, are they not?

Mr. PARKINSON. I would say so. That is just a semantic term.

Mr. YATES. Does your table on page 9 include only pig and ingot, or does it also include semifabricated products?

Mr. PARKINSON. It includes all of the sales of Anaconda Aluminum Co.

Mr. YATES. Does this include both pig and ingot and semifabricated? Or just primary metal?

Mr. PARKINSON. Just primary metal; yes.

Mr. YATES. No sheet, no mill shaped, or anything like that?

Mr. PARKINSON. No.

Mr. YATES. When Reynolds Metals Co. appeared before us, they stated they were essentially a fabricator, rather than a producer, of primary metal. Is this true of Anaconda, as well; are you essentially a fabricating company, or do you intend to give equal weight to both? Your statement indicates that you have bought up several fabricating plants. Do you propose to continue to buy fabricating plants, or will you concentrate on the production of primary metal?

Mr. PARKINSON. I would say that we would probably follow out a program of doing both, just like we have illustrated here in the statement, and as we have done. We believe we should have outside cus-

tomers; we believe it is also essential, in order to operate your plant efficiently, to have a market for some of your production yourself. So we are both—we both sell prime metal, not only aluminum, but others, copper and otherwise, and we also fabricate it.

Mr. YATES. You say on page 10. "All of the sales in force"—ferring to the tables—

were made in the form of pig, wire ingot, and sheet ingot. Consequently, we do not currently fight with extruders, casters of alloys or foundry ingot.

Does that mean that you will not compete with them in the future?

Mr. PARKINSON. No.

Mr. YATES. You contemplate you will?

Mr. PARKINSON. Yes; we are building a very large mill in Terre Haute, Ind., which will be in production by the first of the year, and that will be equipped to make all of those products.

Mr. YATES. Is it more profitable to fabricate aluminum or to sell primary metal—I should say: Is it more profitable to sell fabricated products than primary metal?

Mr. PARKINSON. Well, I would say, generally—that is a difficult question—generally, it is more profitable.

Mr. YATES. The other witnesses from the other companies who have appeared before us have not found it difficult at all; in each instance they have stated that it was more profitable to sell fabricated products.

Mr. PARKINSON. I would say, generally, it has been true. If you are selling a fabricated article in competition, however, and you have to sell it in competition at too low a price, you would probably be better off to sell your primary metal at a profit. So there are exceptions to every general rule.

Mr. RIEHLMAN. On the bottom of page 10, I note that the witness refers to "We have no hot-metal contracts, as we have previously advised this committee."

Are you anticipating entering into hot-metal contracts?

Mr. PARKINSON. No; not in the foreseeable future, because there are no markets or facilities that would lend themselves to doing that at our Columbia Falls plant; that is the only plant we have up in Montana.

Mr. RIEHLMAN. What is your opinion of these hot-metal contracts?

Mr. PARKINSON. Frankly, I know very little about them; we have never dealt in them, and have never gone into the subject.

Mr. RIEHLMAN. Have never given it any serious consideration at all?

Mr. PARKINSON. Have never been approached by anybody in connection with it.

Mr. RIEHLMAN. You know this committee has been discussing them for some time?

Mr. PARKINSON. Yes.

Mr. RIEHLMAN. And you haven't come to any conclusion at all?

Mr. PARKINSON. Well, with respect to what? What kind of a conclusion?

Mr. RIEHLMAN. As to what advantage those who are producing hot metal would have over others that are not able to produce hot metal.

Mr. PARKINSON. I would assume that, if you could buy your metal hot at a cheaper price than you could buy it in ingot form and have

to melt it and make it hot in a foundry or to extrude, you would obviously be better off.

Mr. RIEHLMAN. What effect do you think—if this spreads to other industries and it spreads into your own, what effect is this going to have on the small fabricators?

Mr. PARKINSON. I would think that the small fabricators would be hurt by it.

Mr. YATES. Page 13 of your statement

> The principal competition of domestic aluminum in the United States market is, of course, from Canada.

What form does this competition take? The price is the same as the price you charge and the other companies charge, is it not?

Mr. PARKINSON. The principal metal that we have coming in from any foreign source simply comes from Canada. That is all that statement is intended to represent.

Mr. YATES. Oh—it means that you have competition from the Canadian sources.

Mr. PARKINSON. They are selling in this large market—sell large tonnages in this market.

Mr. YATES. Well, there is no price competition, is there?

Mr. PARKINSON. You mean do they sell at the same price in this market as we do?

Mr. YATES. Yes.

Mr. PARKINSON. It is my understanding that they do. Whether they have any exceptions to that, I do not know. I am not aware of any.

Mr. YATES. There is no price competition, then?

Mr. PARKINSON. Not so far as I am aware.

Mr. YATES. Does your company ever give discounts, or do you sell only at the published price?

Mr. PARKINSON. All of our metal is sold on the American metal market price.

Mr. YATES. You never sell for less?

Mr. PARKINSON. No, we have not. The only times that we have sold for less is when you start up an aluminum plant or you have had a line down, and you start it up again, for a period of time you produce an off-specification or below-specification metal. In other words, it won't meet standard specifications. Rather than to just hold that, you do sell that to those who can utilize that type of metal for certain purposes, and I think generally in the trade that is sold at a lesser price.

Mr. YATES. Well, that is not the published price, then, because the published price is for metal of a particular——

Mr. PARKINSON. That is correct.

Mr. YATES. Does your company buy scrap, aluminum scrap?

Mr. PARKINSON. No. We treat some small amount of scrap from our own subsidiary, the Anaconda Wire & Cable Co., and we melt it for them on toll.

Mr. YATES. Do you have toll arrangements with other companies than your own?

Mr. PARKINSON. No, we have not.

Mr. YATES. Are any of the foreign countries other than Canada selling in our market at all?

Mr. PARKINSON. I believe there has been some Japanese metal offered on the Pacific coast, or at least I have heard there was.

Mr. YATES. At the published price or lower than the published price?

Mr. PARKINSON. That, I don't know. But my informant indicated that was below the domestic price.

Mr. YATES. Below domestic price?

Mr. PARKINSON. Yes.

Mr. YATES. Well, if the Japanese sell substantial quantities at below the current price, will your company's price come down to meet that price?

Mr. PARKINSON. I suppose if it breaks the market, we will.

Mr. YATES. If it breaks the market. Well, it only breaks the market when your company's price comes down, doesn't it?

Mr. PARKINSON. Well, actually the amount offered by Japan on the domestic market has been a very small amount. It has had no significance in connection with the price. We are not enough of a factor in the aluminum business, Mr. Yates, to set the domestic price. We sell at a competitive price, which means that the price that——

Mr. YATES. We are getting into trouble again—when you talk about selling at a competitive price. I would certainly think you were selling at a noncompetitive price.

Mr. PARKINSON. By competitive price, the way that I am using it, that is a price at which the primary producers and so on sell their metal, or the principal metal is sold.

Mr. YATES. Why do you call that a competitive price?

Mr. PARKINSON. Well, we have to meet that competition. If they lower the price, we have to meet it in order to sell our metal. If they raise it, we need that increase because our wages, our costs, our transportation, and everything are going up.

Mr. YATES. But if they don't move the price at all, then you don't compete, do you?

Mr. PARKINSON. Yes, we sell at the same price they do. We compete for the market.

Mr. YATES. We lawyers would call that a non nequitur, I think, in this. Competition in price, to my mind, seems to connote a movement of the price.

Mr. PARKINSON. Oh, I see. Well, your mind works different, Mr. Chairman, than mine, on that.

Mr. YATES. I don't know. I receive the impression that your mind works on a plateau basis, in terms of stability. And I like to think that mine, in terms of this price idea, has some flexibility. Competition connotes a price established by the forces of supply and demand. Where you have a greater amount of metal than you can sell on the open market, ordinarily the price will follow the demand and will come down, as you have in the case of copper, for example.

Now, apparently that is not true in the case of aluminum. Mr. Wilmot, of Alcoa, said he thought you had an administered price in this industry. I asked Mr. Davis that, and Mr. Davis had some hesitancy in accepting the term "administered price." He preferred to think of it as a stable price. Whichever way you look at it—now you are thinking in terms of a competitive price. We all know that whatever name you give to it, apparently it is a level price, and that

there isn't any movement, apparently, in accordance with the pressures of supply and demand.

Do you agree with that?

Mr. PARKINSON. Oh, I think that over the course of time obviously supply and demand will have a lot to do with the price. You have had a period in the past when it has been difficult to supply the demand. You are moving into a different period now, and you might have quite a different thing develop. I don't know. I mean that is one of those things you can speculate about all you want. And I don't know the answer. As a matter of fact, whether it is an administered price or whether the large producers set the price on some kind of a basis that I know nothing about—all I know is that it is our policy to sell on the market price, on the published market price. We sell our copper that way, we sell our lead that way, and we sell our zinc that way, and all the other metals that we produce.

Mr. YATES. You state that your optimism for the industry is based on four factors, the third factor of which is the relative stability of prices for primary aluminum metal and most semifabricated products. That has been the history of this industry, stability of price? It has not veered with supply and demand?

Mr. PARKINSON. Yes. And I think definitely a factor in the growth and success of the industry—in that engineering, planning, contracts for the delivery of material in the future, can be quoted on a price which cannot be done with some of the more volatile metals where the price fluctuates.

For instance, practically all of the brass and copper alloys fabricated articles, it is almost impossible to get, except in Europe, a price quoted on delivery of, say, 3 months or 6 months hence, on that article. You have been able to in aluminum. And I think in planning, if you were going to make a wagon or you are going to make an automobile or whatever article you have in mind, that that is very definitely a factor that has worked in favor of the aluminum industry.

Mr. YATES. Does this mean that insofar as Anaconda is concerned, your prices will met those of your competitors—in other words, will be the same as those of your competitors in the sale of primary metal?

Mr. PARKINSON. When you say meet, that means to me we would be competitive with them; is that correct.

Mr. YATES. Well, that is the same level by your definition, isn't it?

Mr. PARKINSON. Yes; that is correct.

Mr. YATES. Is this true of fabricated products as well?

Mr. PARNINSON. Yes; that is correct.

Mr. YATES. Your fourth point on page 15 states that, as another factor of optimism, the controlled attention of management in all branches of the industry, and all elements of product sale, backed by a comprehensive research and development program. What does "controlled" attention of management mean?

Mr. PARKINSON. Well, actually, the consciousness of top management in all phases of the business having in mind the end results, namely, of sales.

For instance, in lots of businesses and lots of industries, only the sales department are concerned with sales. I would say one of the innovations that the aluminum industry and a few others have taught us is that all parts of the business, even the industrial relations de-

partment, the public relations department, the legal department, if you will, and all departments of the company, if they are sales conscious, and have product sales in mind and a definite coordinated and controlled program, that it bears results.

And I think the aluminum industry has done a significant job in that respect.

Mr. YATES. Thank you, Mr. Parkinson, for your help to the committee.

As I understand it, you will submit to the committee the statement relative to the comparison of your mill costs with those of the other companies whose mill costs appear on page 185 of volume 153 of the Federal Supplement. And you also are going to indicate, or file a statement, which shows the form and the method by which the certificate for amortization was transferred. Also, a breakdown of your customers to determine how many of them are small businesses. In terms of employees, if that is available.

Mr. PARKINSON. Small business in terms of employees?

Mr. YATES. Number of employees of your customers, which has been the rule of the producers who have appeared before our committee. The Small Business Administration Act defines small business as a firm which has less than 500 employees.

If that is available, will you furnish that? If it is not available, I can appreciate the fact that you are just breaking into the field and you do not have the very close company relationships the other companies have.

(See letter dated April 14, 1958, from C. Jay Parkinson, general counsel, the Anaconda Co., Appendix, p. 313.)

Mr. PARKINSON. I doubt if we would have how many employees anybody has. I would be glad to furnish such part of this information you have asked for that is available to us.

Mr. YATES. Thank you.

Mr. O'Connell, we are delighted to see you. Welcome to the committee. We are very interested in what you have to say. Is it your wish to speak from your statement?

Mr. O'CONNELL. Yes.

Mr. YATES. All right, you may proceed.

TESTIMONY OF WALTER F. O'CONNELL, OLIN MATHIESON CHEMICAL CORP.

Mr. O'CONNELL. Mr. Chairman, gentlemen of the committee, my name is Walter F. O'Connell. I am senior vice president of Olin Mathieson Chemical Corp. in charge of its aluminum program and president of ORMET Corp., a corporation organized and jointly owned by Olin Mathieson and Revere Copper & Brass, Inc., for the production of primary aluminum. My associates and I are happy to be here and to have this opportunity to share with the subcommittee our thoughts and our hopes for the future of the aluminum industry and the vital role to be played by small business in that future.

Since this is our first appearance before the subcommittee it may be helpful for me to say a few words by way of introduction about our company and its interest in aluminum. Olin Mathieson is a diversified manufacturing company creating, producing, and selling

products within the fields of chemicals, arms and ammunition, explosives, plant foods, drugs and pharmaceuticals, cellophane, paper, lumber, and metals.

Our industrial chemicals include organic and inorganic chemicals, and are manufactured at 18 plants throughout the country—in Virginia, in Kentucky, in New York, in Louisiana, in Alabama, in Texas, and other locations. Phosphate chemicals are produced at Joliet, Ill. Arms and ammunition, sold under the well-known Winchester and Western trade names, are manufactured at East Alton, Ill., and at New Haven, Conn. Explosives for commercial use are made at several locations in Illinois, Indiana, California, and other States. Our pesticides and plant foods, including "Amo-Phos" fertilizer compounds, are important to agriculture. Our drugs and pharmaceuticals, which we market under the E. R. Squibb & Sons label, are produced at Brooklyn, N. Y., and at New Brunswick, N. J. A group of products including Olin cellophane, polyethylene film, paper, and forest products are manufactured primarily in the Southern States but also in Illinois and Indiana. Nonferrous metals are fabricated at East Alton, Ill., and at New Haven, Conn. We are actively engaged in research and development of high energy and nuclear fuels at Niagara Falls, at Ordill, Ill., and in Connecticut. We have extensive international operation. We have approximately 40,000 employees and 64,000 stockholders. Of course there is much more that I could say about our company and its products, and we would be glad to answer any questions that the subcommittee may have concerning any of them. Incidentally, we have just produced a new and interesting brochure which I will deliver to each member of the committee at the end of this paper.

Mr. YATES. We will be very happy to receive it.

Mr. O'CONNELL. Our entry into aluminum is a product both of our own experience as a fabricator of nonferrous metals and of the Government's interest under the impetus of the Korean emergency in expanding aluminum capacity. This subcommittee will recall that the mobilization agencies, using the authority provided by the Defense Production Act of 1950, prompted several rounds of aluminum expansion. At the time of our participation it was a condition that the expansion should be accomplished, if possible, without the use of Government financial assistance, whether through loans or market guaranty or stockpile contracts. Only accelerated tax amortization would be available.

Olin Mathieson was a "natural" to participate in the Government's program. We had the metallurgical know-how which came from our history as a fabricator of copper, brass, bronze and other copper base alloys. We had engineered, supervised the construction of, and operated Government-owned aluminum facilities during World War II. We were evolving an important new process known as Roll-Bond, using aluminum.

We entered the program, and our only governmental assistance was in the form of necessity certificates for tax amortization covering part of the cost of the primary production facilities and supporting power facilities now under construction and, pursuant to the then-open aluminum fabrication facility goal, a necessity certificate with respect to a fabrication plant.

Since the issuance of the original certificates, there has been an increase in capacity not covered by accelerated tax amortization and the formation wth Revere of Ormet, a jointly owned subsidiary to construct, own, and operate the primary aluminum production facilities. The major facilities are these:

First, an alumina plant at Burnside, La., on the Mississippi River, owned by Ormet, which will have a capacity to produce annually 345,000 tons of alumina. Bauxite for the plant will be purchased from an established supplier in Surinam under long-term contracts. The plant is scheduled to begin operation next month.

Second, an aluminum reduction plant at Omal, Ohio, on the Ohio River, owned by Ormet, which will have a capacity to product annually 180,000 tons of primary aluminum. This plant will consume the entire capacity of Ormet's alumina plant. We expect to tap our first metal shortly.

Construction of the plant should be completed in 1958. Olin Mathieson has contracted to purchase from Ormet, at cost, 66 percent of its aluminum production, and Revere has contracted to purchase, at cost, the remaining 34 percent of its production. Supporting power-generation units at Cresap, W. Va., a short distance upstream on the Ohio River are also under construction.

Third, an aluminum rolling mill at Omal, Ohio, at a site adjacent to Ormet's aluminum reduction plant, which will have a capacity, depending upon product mix, to fabricate annually between 96,000 and 120,000 tons of primary aluminum into flat or coiled rolled products. This plant, which is owned and operated by Olin Mathieson, went into partial operation in October 1957, and is scheduled for completion during 1958.

Fourth, three oceangoing vessels, scheduled for delivery in 1959, to transport bauxite from Surinam to the alumina plant, and a fleet of 30 barges and a towboat, all scheduled for delivery in 1958, to transport the alumina up-river to the reduction plant.

In addition, Olin Mathieson is presently fabricating and will step up fabrication of primary aluminum at other facilities, including its extrusion plant at Gulfport, Miss., its wire and cable plant as Chattanooga, Tenn., the sheet, strip, and extrusion plant at Riverside, Calif., of Hunter Engineering Corp., a 51 percent owned subsidiary of Olin Mathieson, and the Olin Mathieson brass mill at East Alton, Ill., where Roll-Bond is produced.

To complete the picture of our aluminum program, I would add that in association with French, British, and Swiss aluminum producers, we are a major stockholder in Fria, Compagnie Internationale pour la Production de l'Alumine, which is now constructing an alumina plant in French Guinea, West Africa. This plant, a part of which is expected to commence operations in 1961, will have an annual capacity of approximately 480,000 metric tons. Bauxite will be mined from the rich deposits adjacent to the plant site.

The price of admission to the aluminum field is high. The capital investment required per ton of basic capacity is much greater for aluminum than for any other major metal. The total cost of the new facilities I have described will be in excess of $475 million, of which Olin Mathieson's share is $325 million. And yet our share of primary metal is only about 5 percent of the national capacity.

This is who we are in aluminum and how we got there. Now as to where we believe the aluminum industry, including small business is going:

We are entering production at a time when the industry is confronted with important immediate problems, most notably an excess of supply over demand. The extent of the surplus generated in 1957 is suggested by a BDSA report which states that inventories at reduction plants increased by over 80,000 tons during the first 10 months of 1957.

As also reported in the BDSA publication, aluminum companies which hold market guaranty contracts "put" over 200,000 tons of aluminum to the Government during the first 9 months of 1957. A decline in the demand for durable goods, a slackening rate of plant and equipment expenditures throughout industry and the uncertainties in the general business situation may continue to hurt aluminum consumption in 1958.

Despite the present oversupply, we are hopeful that with the aid of our aggressive sales effort now underway, Olin Mathieson will achieve a satisfactory percentage of the existing market. This conclusion is based, in part, upon the belief that our sales will be assisted by our present position and reputation as a supplier of quality metal products. In 1957 we began a national advertising campaign directed to "Olin Aluminum." A sales organization, with offices in the major aluminum consuming centers of the country, is nearing the end of formation and sales representatives have been calling on prospective customers for some months. Most of the individuals in this organization have had from 5 to 30 years of experience in the metals field.

Looking beyond the immediate problems into the long-range future, we believe that the industry's prospects are bright. Recent discoveries of bauxite in various locations, including Africa and Australia, remove growth limitations caused by previous uncertainty with respect to a workable supply of the raw material. Through our participation in the Fria project, we have secured the bauxite reserves needed for the additional capacity which may be expected to result from future growth. Furthermore, we are carrying out an exploration program for additional bauxite reserves in many parts of the world.

In addition to our own new facilities, other producers are now increasing their capacities, demonstrating that they share our faith in aluminum's future. At its November 1957 hearings, this subcommittee heard estimates of aluminum consumption ranging up to 5 million tons a year by 1965. Our own market research confirms, in general, the consumption estimates that have been submitted by the other producers to this subcommittee. But to reach the estimated levels, new demands for aluminum must be created. We believe that new uses for aluminum will be found and developed, including uses which have, in the past, been discouraged by reason of unavailability of supply. Each of the large producers, we understand, is working to develop new uses. Research has always been a cornerstone of our company's growth, and we are now actively engaged in what we believe to be promising programs for new applications of aluminum.

This subcommittee is already familiar with some of the fields in which aluminum is gaining acceptance. At its November hearings

it heard testimony on aluminum penetration into the passenger-car market. A recent issue of Missile Week states that virtually every missile now in production or under development includes aluminum. There have been important breakthroughs in the container and packaging fields, most notably in the production of aluminum cans, which will eventually be competitive with tin plate.

The construction field, traditionally aluminum's largest market, illustrates aluminum's potential. The average new residential unit now utilizes from 30 to 40 pounds of aluminum. We hope that this can ultimately be increased to an average of 1,000 pounds per unit. "Curtain wall" construction, paneling for commercial, industrial, and residential buildings, roofing and siding sheet, including metal clapboard house siding, exterior and interior trim, hardware, windows, and doors are all areas in which aluminum is gaining new acceptace. Stepped-up road construction will increase sales of aluminum lamposts, signs, and railings.

This reference to construction leads me directly to the question of the role of small business in the aluminum industry, for the storm windows, the shower doors, the drain gutters, the downspouts, the railings, and the thousands of other aluminum products used in construction are all handled, at one stage or another, by small businesses.

Our position on small business is simply this: We expect small business to be our best and our largest group of customers, and we need them. We would like this subcommittee to know what we are doing to aid their prosperity, and thus our own prosperity.

First, our Metallurgical Research Division in New Haven, Conn., composed of researchers knowledgeable in aluminum technology, is directing its efforts to the creation of new uses for aluminum in which small business will participate as the ultimate fabricator and adaptor.

An illustration of their efforts is in the progress now being made toward the development of a number of architectural paneling systems. We foresee the time when a whole new industry—whether made up of lumber yards, contractors, or other—will be able to assemble and construct small buildings and private homes out of the components we are developing.

There are a large number of small businesses already engaged in aluminum store front assembly, and our research into architectural curtainwall will aid them importantly.

Other examples are the work we are doing in the development of a commercially feasible aluminum boat trailer and in small-boat design.

Much of our research is creating new products for small businesses who could not have afforded such research on their own, but I would make clear that research is a two-way street, and that we, in turn, have benefited from research carried on by forward-minded small-business men. Examples of new uses for aluminum created by the research of progressive small businesses include a specially designed aluminum strip for edging flowerbeds, an aluminum "six-pack" which now competes with cardboard beer containers, aluminum pails, nails, and lamp sockets.

Second, a substantial research and development budget is being spent in efforts to solve the particular kinds of problems which fabricators of the small-business class encounter, particularly in the areas of product design, of forging, including fastening and chipless form

techniques, of bolting, including welding, brazing, and soldering, and of finishings, such as anodizing, lacquer coats and painting. Success in these efforts will enable small business, on its own, to adapt aluminum for many new uses and will win new acceptance for their products.

In these cases, as in the case of more basic research, we have directed our services to benefit small-business men who could not, in the main, have financed such research on their own. Our larger customers frequently do not require such services for they are able to do it for themselves.

Third, our technical services stand behind all of the semifabricated aluminum we sell to small business. We are organizing 12 major district sales offices throughout the United States, each of which will have a resident field engineer. These resident field engineers, backed up by a central production engineering group will always be available to assist our small-business customers with technical know-how and information.

Fourth, we are establishing a nationwide network of Olin Mathieson aluminum distributors, each of whom will be an independent small-business man in his community.

This program will benefit both the small businesses who are appointed as distributors and those whom they will serve. It will concentrate particularly on the smaller consumers of semifabricated products who we expect will consume a large part of our production. These distributors are as important a part of our sales effort as are our salesmen and will undergo training programs as rigid and complete as those for our own salesmen. At the present time our program is well underway. We have already begun to ship stocks to distributors from the initial production of semifinished sheet at our Omal mill.

Fifth, we have started a nationwide advertising campaign to alert and inform small business that we stand ready to custom-tailor our aluminum to their specifications, with finishes and tolerances designed to meet individual production needs. We plan an even more specific campaign in the trade journals.

I also have with me some of the ads which I hope you have seen. In case you have not, I will give each of the members a copy.

Mr. YATES. They are very impressive.

Mr. O'CONNELL. We hope eventually to promote the products of small business as a direct tie-in to our own advertising.

Finally, the commencement of operations at the aluminum reduction plant increases the available supply of domestically produced pig, minimizes the likelihood of a supply shortage such as was prevalent when this subcommittee investigated the market in 1955, and adds an element of flexibility and mobility that should benefit small businesses that purchase pig. We are, of course, an integrated producer, but the increased supply represented by ORMET's production is a substantial one and gives rise to the expectation that we will have some pig available for many who need it.

We are in the aluminum business to stay, and to sell. Many of the potential customers our sales representatives have been calling on are small-business men. As newcomers to the field, we appreciate the opportunity afforded by this hearing to make known that we are looking for customers, and we are grateful for anything this sub-

committee can do to help us find them among the small-business men of America.

Service to small business is nothing new for Olin Mathieson. Our brass mill, where much of our metallurgical experience has been accumulated, is a traditional supplier of semifabricated products to many small-business men who fabricate our products into final form.

We expect the same to be true in aluminum. We need the support of small business for our aluminum program to be successful. By increasing the available supply of both pig and semifabricated products, by research and developmental and technical services to small business, by sales, advertising and distributors' programs geared to small business—we intend to merit that support.

Mr. YATES. Thank you for a very excellent statement, Mr. O'Connell. Some of the members of the committee have to go to the floor for a few minutes, so the suggestion has been made that we recess at this time and come back at 1:30, if that is satisfactory to you.

Mr. O'CONNELL. Right.

Mr. YATES. The committee stands in recess until 1:30.

(Whereupon, at 12:15 p. m., the hearing was recessed, to reconvene at 1:30 on the same day.)

AFTERNOON SESSION

TESTIMONY OF WALTER F. O'CONNELL—Resumed

Mr. YATES. I notice on page 4 you state the total cost of the new facilities will be in excess of $475 million, of which Olin Mathieson's share is $325 million. How are you getting this money?

Mr. O'CONNELL. Most of the $325 million has been borrowed.

Mr. YATES. It has been borrowed—long term bonds or debentures or what?

Mr. O'CONNELL. Long term notes purchased by institutions, mainly life insurance companies.

Mr. YATES. What rate are you paying on it?

Mr. O'CONNELL. The bulk of the money is at 4⅜ths. Some of the money is at 4 percent. Obviously these loans were arranged some time ago.

Mr. YATES. Would it be better to arrange them now? Could you get a better deal if you arranged them now?

Mr. O'CONNELL. No.

Mr. YATES. It would be worse?

Mr. O'CONNELL. Slightly.

Mr. YATES. Who is putting up the difference between 325 and 475?

Mr. O'CONNELL. The 475 includes the total cost of the Fria project, in which we have a 53½ percent interest. So that 47½ percent of Fria is supplied by others.

Mr. YATES. 46½?

Mr. O'CONNELL. I am sorry, 46½ percent of Fria is supplied by others. The Swiss-British-French partners. And also included in the 475, and excluded in the 325, is the Revere share.

Those two contributions on the part of others make up the main difference between 475 million and 325 million.

Mr. YATES. Part of your 325 is going for Fria, you said—or all of it?

Mr. O'CONNELL. Part of the 325 is going for Fria.

Mr. YATES. Is any of the extra 125 going to Fria?

Mr. O'CONNELL. Oh, yes.

Mr. YATES. Is the 475 million only for Fria?

Mr. O'CONNELL. No.

Mr. YATES. How much of the 475 is for Fria?

Mr. O'CONNELL. The total Fria cost is $109 million.

Mr. YATES. And Olin will have 53½ of that, is that correct?

Mr. O'CONNELL. It is not quite correct. The French government participates through loans to the extent of about $20 million, so that Olin's share of Fria would be 53½ percent of 109 less approximately $20 million.

Mr. YATES. The French Government is loaning $20 million? To whom is it loaning it?

Mr. O'CONNELL. Fria.

Mr. YATES. What are the names of the French, British, and Swiss aluminum producers who will own the remainder of Fria?

Mr. O'CONNELL. The British partner is British Aluminium.

Mr. YATES. What will its interest be?

Mr. O'CONNELL. Ten percent. The Swiss partner—I will have to furnish you that, it is a complicated name.

(Mr. O'Connell subsequently advised that the name is Aluminium Industrie Aktiengesellschaft.)

We call it AIAG. The interest is 10 percent. And the French partner is Pechiney and Ugine, the two French producing firms which we generally refer to as one. They have a 26½ percent interest in Fria.

Mr. YATES. Do the foreign companies you have named have their own production plant now?

Mr. O'CONNELL. They do.

Mr. YATES. Each of them does?

Mr. O'CONNELL. Each of them does.

Mr. YATES. And Fria will be used for the production of aluminum?

Mr. O'CONNELL. No, of alumina.

Mr. YATES. Of alumina. The alumina will be distributed when produced to the British, to the Swiss, to the French, and to your company, in the proportions of your ownership?

Mr. O'CONNELL. Correct.

Mr. YATES. Will any of it be sold in any other market?

Mr. O'CONNELL. Possibly, but it is not in the present plans.

Mr. YATES. Is alumina sold on the open market now?

Mr. O'CONNELL. In some instances; I think Anaconda's arrangement is one of the few.

Mr. YATES. Is that an open market?

Mr. O'CONNELL. No.

Mr. YATES. That was rather a closed deal with Kaiser; was it not?

Mr. O'CONNELL. That is right.

Mr. YATES. Do you know of any other instances of the sale of alumina other than by the sale by Kaiser to Anaconda?

Mr. O'CONNELL. No, I am not familiar with the Harvey arrangements, and therefore can't speak on that subject, but alumina does not sell in the market in the same sense that aluminum does, or any other commodity does.

Mr. YATES. Will Olin be selling aluminum in the world market? Or should I say ORMET, which name should I use?

Mr. O'CONNELL. You should use "Olin," because "ORMET" has all of its production sold already to the two sponsoring companies. The responsibility for the disposition of it, whether in pig or in fabricated production, is the responsibility of the two partners.

I must say at this time, in answer to some of the questions you might well ask, I will have to say I do not quite know, because, as I mentioned in the statement, we expect to tap our first metal in 10 days or 2 weeks, and this is with respect to 1 line of 5 lines. And so it will be many months really before we have a real flow of metal from ORMET, so that we are really in the position of being a producer of pig.

Many of these questions as to whether or not we would sell abroad have not yet been resolved, frankly.

Mr. YATES. If you do sell either abroad or domestically, will you sell at any price other than the public price?

Mr. O'CONNELL. No.

Mr. YATES. Is there a reason for that?

Mr. O'CONNELL. Yes, I think there is.

Mr. YATES. Would you tell us what the reason is?

Mr. O'CONNELL. Well, we obviously could not sell one pound of aluminum at a price higher than the published price, and we could not afford to sell——

Mr. YATES. Why could you not sell above the public price?

Mr. O'CONNELL. Because no one would buy it.

Mr. YATES. And you think the price is really determined, in contrast with the witness from Anaconda? The witness from Anaconda testified that even though he cut the price by 1 cent, that would not increase their sales.

Mr. O'CONNELL. I had not gotten to cutting the price.

Mr. YATES. You say that as you go up 1 cent, you do not anticipate that this will attract customers?

Mr. O'CONNELL. Obviously not.

Mr. YATES. Is the converse of that true? Suppose you cut the price 1 cent. Would you attract customers?

Mr. O'CONNELL. Before I make the supposition, I must say that from our knowledge of the aluminum industry, we simply could not afford to sell the metal any cheaper than the published price.

Mr. YATES. Why not?

Mr. O'CONNELL. For a large number of reasons. Anything lower than the published price would, in my judgment, provide a completely inadequate return on the large investment made in the aluminum facilities.

Mr. YATES. If Alcoa or Reynolds decided to cut the price by 1 cent, would you follow suit?

Mr. O'CONNELL. We would have to, because if we did not, we would be in the position again of offering metal at 1 cent over the published price, and we would sell absolutely none.

Mr. YATES. And if Alcoa and Reynolds wanted to drive you out of business, according to your previous statement, inasmuch as you have a low profit factor, all they would have to do is cut the price by 1 cent or 2 cents?

Mr. O'CONNELL. I suppose if this continued, our company would end up out of business, although we have a rather substantial earning capacity other than aluminum.

Mr. YATES. Are you familiar with your mill costs?

Mr. O'CONNELL. Our mill costs are simply a set of figures which our cost people, engineering people, operating people, estimate it will cost.

Mr. YATES. I think that is probably true with all the companies; is it not?

Mr. O'CONNELL. No. I think all of the other companies have exact accounting records of what it actually costs.

Mr. YATES. You are not yet in that position?

Mr. O'CONNELL. Our production will start.

Mr. YATES. Yes; I know that.

Mr. O'CONNELL. In 2 weeks.

Mr. YATES. You do not know what your mill costs are anticipated to be?

Mr. O'CONNELL. They are simply estimates.

Mr. YATES. Could you tell us whether the estimates approximate the mill costs which are listed on page 185 of volume 153 of Federal Supplement Report?

Mr. O'CONNELL. Not without considerably more information. I would have to know precisely what has been included in the so-called mill costs in that schedule. I am familiar with it, although I do not remember the cents per pound.

Mr. YATES. Do they not agree to what is included in mill costs?

Mr. O'CONNELL. I do not think so.

Mr. YATES. Can you give us a list of what ORMET, what their mill costs involve?

Mr. O'CONNELL. Yes.

Mr. YATES. Could you give us a list of items ORMET includes in mill costs without giving us a percentage of each?

Mr. O'CONNELL. Yes. It would be in the broad categories of raw material, labor, and manufacturing burden.

Mr. YATES. The overhead burden?

Mr. O'CONNELL. Yes, the factory overhead burden.

Mr. YATES. Do not the other companies include these costs, too?

Mr. O'CONNELL. I do not know, and that is why I made the statement I did. But to make a comparison, you would have to go beyond these figures, it would seem to me.

Mr. YATES. Well, in the items as they are listed on page 185, they show that for these companies there are the raw material costs, the power costs, and the manufacturing costs.

Mr. O'CONNELL. I think there would be no question about the raw material or the labor costs, but in manufacturing costs, I think, depending upon the way the books are kept and the cost accounting theories followed by the various companies, you could have a difference.

Mr. YATES. It is interesting, however, that the Government saw fit to include the comparison between Alcoa, Reynolds, and Kaiser on the basis that they had the same type of costs that went into mill costs. Are you suggesting that ORMET does not have the same basis?

Mr. O'CONNELL. Well, what I am trying to say, I think, is I do not know what particular elements of costs have been included in that particular mill cost, and therefore I would not know which one of our items, of course, should be included, especially in manufacturing overhead, in order to be strictly comparable.

Furthermore, we are dealing today entirely with estimates. And it would be some considerable time after we had achieved normal operations, shall we say, that any of our costs would be realistic.

When a complicated set of facilities like a potline commences production, it is normal for the quality of the metal to be somewhat below standard until the line gets broken in. The efficiency with which the line operates is dependent to a large extent upon the ability of the operators to operate efficiently. We will commence largely with green crews, who will improve, we hope, in efficiency as we go down the months.

Mr. YATES. Perhaps we should defer further questioning on this until ORMET has had a chance to operate.

Mr. O'CONNELL. I would think so; I would think anything that is said now would be pure speculation.

Mr. YATES. Perhaps that is true. Would you put in the same realm of speculation your statement that you anticipate that there will be this very low profit factor between your costs and sales price at 26 cents?

Mr. O'CONNELL. Yes, naturally, since the price, the selling price is fixed and the cost is something we will not be sure of until we have achieved it, the balance should be considered also speculative.

Mr. YATES. Do you contemplate that you will make a profit in selling pig?

Let me ask this question first: At what price will ORMET sell the primary metal to Olin Mathieson and to Revere?

Mr. O'CONNELL. As I said in my statement, it is sold at exactly ORMET's cost.

Mr. YATES. At ORMET's cost. You do not know what their cost is?

Mr. O'CONNELL. This is the same cost we have been discussing for the last several minutes.

Mr. YATES. The cost we were discussing was only the mill cost; ORMET, I assume, when it sells to both of your companies will also include some of the administrative expenses?

Mr. O'CONNELL. Yes, indeed.

Mr. YATES. So it is not the same costs we are talking about?

Mr. O'CONNELL. But the largest part of the costs we are now talking about——

Mr. YATES. What portion will that cost be of the total?

Mr. O'CONNELL. I think we are back to the same subject, but as we——

Mr. YATES. We are not really back to the same subject. We are talking about a distribution of costs rather than a quantity of costs here. I am asking now, what percentage of the total cost at which ORMET will sell to Olin and to Revere will mill costs represent?

Mr. O'CONNELL. I would have to do some studying to give an exact——

Mr. YATES. Will you speculate, subject to correcting it at a later time?

Mr. O'CONNELL. I would say that my guess would be that the mill cost would comprise close to 75 percent.

Mr. YATES. Close to 75 percent.

Mr. O'CONNELL. Of the total cost, under this particular setup as we interpret good cost accounting.

Mr. YATES. I appreciate the fact that this is a speculation at this time, and if you want to correct this record at a later time, after you have given it greater consideration, why, I am sure it will be all right for you to do so.

Mr. O'CONNELL. Fine.

Mr. YATES. How did it happen that you went into business with Revere? Was it because Revere had a certificate of necessity?

Mr. O'CONNELL. Revere did not have a certificate of necessity.

Mr. YATES. They did not have. Does ORMET have a certificate of necessity for the construction?

Mr. O'CONNELL. It has a certificate of necessity which covers 60,000 tons of 180,000 tons.

Mr. YATES. And is that the extent of all the certificates of necessity that are involved?

Mr. O'CONNELL. No. There is an additional certificate of necessity covering a portion of the alumina facility, and there is a certificate of necessity covering 1 of the 2 power generating units being built at Cresap, W. Va.

Mr. YATES. The alumina facility to which you referred is Fria?

Mr. O'CONNELL. No.

Mr. YATES. Is there another alumina facility anywhere?

Mr. O'CONNELL. There is, at Burnside, La.

Mr. YATES. And what is the extent of that? Is that referred to in your statement?

Mr. O'CONNELL. Yes.

Mr. YATES. And the extent of that certificate, the amount of that certificate is referred to in your statement?

Mr. O'CONNELL. It is not referred to in the statement. The plant is referred to in the statement.

Mr. YATES. Would you give us that?

Mr. O'CONNELL. A portion of the alumina facility is covered by a certificate of necessity.

Mr. YATES. Do we know the amount of the alumina facility?

Mr. O'CONNELL. We do, but I am not sure—if I could put my finger on it, I would be happy to furnish that. We have that information accurately.

Mr. YATES. And then there is a third——

Mr. O'CONNELL. One of the 2 power units, 1 of the 2 power generating units is covered by a certificate of necessity.

Mr. YATES. To whom was the certificate of necessity which ORMET now owns issued originally, to ORMET?

Mr. O'CONNELL. No. It was issued originally to Olin Mathieson. And with the permission of the issuing authority, it was transferred from Olin Mathieson to ORMET.

Mr. YATES. Did Olin also receive the certificates for the construction of the other units?

Mr. O'CONNELL. Yes. I refer to the set of certificates.

Mr. YATES. Is Revere a subsidiary of any other corporation?

Mr. O'CONNELL. Not to my knowledge. I would say a substantial stock interest in Revere is held by American Smelting & Refining.

Mr. YATES. Has there been a 50–50 investment in ORMET by Revere and by Olin?

Mr. O'CONNELL. Yes, as far as equity is concerned, the contributions are 50–50.

Mr. YATES. How does it happen that you have a two-thirds and one-third ratio of delivery of the aluminum produced at cost?

Mr. O'CONNELL. Well, the entire transaction with Revere was one of rather long negotiation. We were interested in going into the aluminum business, we were well along our way into it. Revere was also studying the possibilities of going into aluminum.

I think it is safe and fair to say that we were much farther along in our program than they were, and the 50–50 equity and two-thirds and one-third division of the metal is simply a negotiated, arms length transaction which was quite satisfactory to both sides.

Mr. YATES. It is interesting that you have that sort of an arrangement, when each of the parties contributes an equal share, that they consent to a distribution of their products on a two-thirds and one-third basis. Certainly Revere is in a position to use as much as Olin; is it not?

Mr. O'CONNELL. That would depend upon the size of their fabricating facilities, and their ability to move metal, or what they believe is their ability to move metal.

Mr. YATES. We are a little puzzled by this unique arrangement that you have with Revere, because apparently there is no distribution of profit; there is just a distribution of output.

Mr. O'CONNELL. That is correct.

Mr. YATES. Does your contract provide that Revere may get a greater portion of the output later?

Mr. O'CONNELL. No; the contract provides for no more than the present share of the present capacity for Revere and for Olin. There are arrangements in the agreement whereby if both parties choose to add to the present facilities, that they could be added, so that the ORMET vehicle could be used for expansion of facilities.

Mr. YATES. I see. Does either Revere or American Smelting & Refining have a substantial stock interest in Olin?

Mr. O'CONNELL. They have no interest at all in Olin.

Mr. YATES. It is still a very unusual arrangement, where you have a 50 percent contribution by each of the parties and a two-thirds and one-third distribution of the products.

Mr. O'CONNELL. Yes. May I say this: It is not quite as unusual as it seems. The ORMET corporation was financed largely on borrowed capital. The borrowings were collateralized by supply contracts from Olin and from Revere. So that by virtue of Olin taking two-thirds of the output of ORMET, to the extent that ORMET's funds are borrowed, Olin is really supporting two-thirds of the debt and Revere, one-third of the debt. So that the disparity, if any, between two-thirds and one-third on take, and 50–50 on contribution of capital, is limited only to the equity portion of the ORMET capital structure.

Furthermore, Olin has an option for a 25-year period to purchase from Revere at its cost one-sixth more of the stock, bringing the equities in line with the take arrangement. Whether we will exercise that option or not is something we will decide in the future.

Mr. YATES. In your statement on page 3 you say that you will purchase bauxite from an established supply in Surinam under long-term contract. This is not another producer, is it?

Mr. O'CONNELL. This is a miner.

Mr. YATES. But this is not one of the other producers?

Mr. O'CONNELL. No. This is a Dutch company which has been in the mining business for many years, and owns these reserves and mines them, and we buy the bauxite, bauxite placed on board ship.

Mr. YATES. You have an aluminum rolling mill at a site adjacent to Ormet. Do you intend to go into the hot metal business there?

Mr. O'CONNELL. Well, since our mill is adjacent to the ORMET facility, and since we must have recasting facilities that a rolling mill normally needs, we will cast into rolling ingots from hot metal.

Mr. YATES. How will delivery of the hot metal be made, by truck the same as General Motors, rather than just shooting it by trough or some other way?

Mr. O'CONNELL. I assume so, it would be in a vehicle of some sort, in some kind of a hot crucible.

Mr. YATES. Then you intend to go into the hot metal business too, for you own purposes.

Mr. O'CONNELL. For our own purposes.

Mr. YATES. What about other companies, do you intend to enter into hot metal contracts with other companies?

Mr. O'CONNELL. We have been approached as to our interest in a hot metal deal, and since our plans at the time call for an approximately balanced primary fabrication setup, we stated that we didn't have any interest. As to whether or not we would consider a hot metal deal in the future I think would depend upon the circumstances at the time and the quantities and would be looked upon as a completely separate proposition. It may be of interest and it may not.

I might say here also that we have so much ahead of us now to accomplish in the next year or so that we are not looking for any new problems.

Mr. YATES. Who approached you with reference to the hot metal deal? Did you say that somebody approached you, or you approached somebody else?

Mr. O'CONNELL. No, we have been approached.

Mr. YATES. When were you approached?

Mr. O'CONNELL. I think it was in the summer of 1956.

Mr. YATES. Who approached you?

Mr. O'CONNELL. One of the large automobile manufacturing companies.

Mr. YATES. Either Ford, General Motors, or Chrysler; which of them?

Mr. O'CONNELL. General Motors.

Mr. YATES. Were you then in competition with Reynolds for the hot metal contracts?

Mr. O'CONNELL. I don't think so. This was not the same sort of a thing that you might imagine. We were going into the aluminum business, and everybody knew it, and we were simply asked whether or not we could have any interest in a hot metal deal. The details of it, the quantities, the prices, and so forth, we didn't even get to discuss, because, as I said——

Mr. YATES. How far did negotiations go?

Mr. O'CONNELL. One conversation.

Mr. YATES. One conversation? And you indicated that you weren't interested in going into the deal?

Mr. O'CONNELL. That is right.

Mr. YATES. At any price?

Mr. O'CONNELL. Well, I believe I said at the time, we were not interested in seriously discussing a hot metal deal at that time, that we had our plans fixed, and so much to do that we couldn't consider anything else at that time. Whether that opportunity is still open or not I don't know.

Mr. YATES. Do you have any contracts to furnish metal with any of the other automobile companies now?

Mr. O'CONNELL. We do not. We hope to sell the automobile companies fabricated metal.

Mr. YATES. Fabricated production?

Mr. O'CONNELL. Sure.

Mr. YATES. You won't sell them primary metal?

Mr. O'CONNELL. No. Our hope, as I have stated here, is to have a balanced facility of bauxite through to the semifabricated products, and to sell the semifabricated products to, among others, the automobile companies, I would hope.

Mr. YATES. Is there a greater profit in prospect for Olin through the sale of fabricated products or through the sale of primary metal?

Mr. O'CONNELL. Well, to a large extent our fabrication costs are in the same state as our primary costs.

While the mill has been operating since October, it has been operating on a small set of cold mills, and the hot mills will not be in operation until May or June of this year, and we generally consider 1958 the year of completion of the rolling mill as well as the primary plant. Therefore, as to the cost of fabricating from pig to semifabricated rolled products, for instance, we have a set of estimates, projections, so that costs from our plant will be somewhat meaningless until we have operated for a considerable period of time under normal circumstances.

Mr. YATES. You have indicated, however, that you intend to go from bauxite to the semifabricated stage. Apparently you don't intend to stop merely with the sale of primary metal, therefore you must find the prospect of selling semifabricated forms profitable, more profitably than the sale of metal itself?

Mr. O'CONNELL. Yes.

Mr. YATES. That was the question I asked you.

Mr. O'CONNELL. Well, I thought your question was, do you think there is more profit in the fabrication——

Mr. YATES. In the sale of fabricated products than in the sale of primary metal.

Mr. O'CONNELL. I am sorry. The answer to that question is that we very definitely think of fabricated metal. I thought you were comparing the first part of the operation with the final part. I thought you were asking whether it was more profitable to be in the pig business than to be in the fabrication business, and not in the pig business.

Mr. YATES. No—well, assuming that you will have the metal available, it is still more profitable to be in the fabricating business, isn't it?

Mr. O'CONNELL. We think so.

Mr. YATES. Do you know whether the other American producers have interests abroad as you will have in Fria?

Mr. O'CONNELL. I do not know.

Mr. YATES. Do you anticipate that you will sell in the foreign markets in competition with British Aluminium, the Swiss AIAG, and the French outfit, Pechiney Ugine?

Mr. O'CONNELL. Under our present plans, our first step in aluminum would be to market domestically with the production and the facilities that we have laid out and which are now nearing completion. Whether further down the road we find it wise or prudent to sell metal abroad in competition with these people, I do not know.

Mr. YATES. Do you have any agreements with these people that you will not sell in other markets?

Mr. O'CONNELL. No, we do not.

Mr. YATES. Does British Aluminium sell in the United States?

Mr. O'CONNELL. If they do it is in very small quantities. I don't think they have any representation here.

Mr. YATES. If I understand your previous answer to my question as to why you are selling at the published price, you state that you will have to sell at this price in order to break even or make a small profit.

Mr. O'CONNELL. I don't think I used quite those words. I said that from our knowledge of the aluminum business we could not afford to sell at a price cheaper than the present published price.

Mr. YATES. Is that because of the new debt structure that you have?

Mr. O'CONNELL. It is because of a large number of factors that contribute to the cost of making aluminum to a large extent, including the huge capital costs required to get into the business.

Mr. YATES. You talk about helping small business through the part three. Will that be helping small business which is engaged in the aluminum industry, or in other industries?

Mr. O'CONNELL. In the aluminum industry.

Mr. YATES. You will be engaging in competition with many of the fabricators in the aluminum industry, will you not, on the same basis as the other producers engaged in such industry?

Mr. O'CONNELL. I don't think so, our policy is to stop with the semi-fabricated mill products.

Mr. YATES. You will not go through with any finished products?

Mr. O'CONNELL. Not as I understand the finished product. We would sell the sheet aluminum, coil aluminum, extruded parts, and so forth. The one exception would be wire and cable, which goes directly to the consumer from our market.

Mr. YATES. Do you have a contract yet with anybody, a long-term contract?

Mr. O'CONNELL. To sell?

Mr. YATES. Yes?

Mr. O'CONNELL. No, we haven't.

Mr. YATES. On page 9 you make the statement finally—

that the commencement of operations at the aluminum reduction plant increases the available supply of pig—

and then you go on to say—

we are of course an integrated producer, but the increased supply represented by Ormet's production is a substantial one, and gives rise to the expectation that we will have some pig available for many who needed it.

This is more in expectation than assurance, isn't it?

Mr. O'CONNELL. Yes, at this point it would be more in expectation.

Mr. YATES. As of the moment you think you would be able to use most of your production itself?

Mr. O'CONNELL. At the moment we believe that we will always be both a buyer and a seller of pig, as well as a producer and a large consumer of pig.

Mr. YATES. Did I understand you to say that you propose to buy and sell pig?

Mr. O'CONNELL. No, not in the sense of a broker, if that is what you mean.

Mr. YATES. I am trying to find out what you meant. I understand you to say that you intend to both buy and sell pig?

Mr. O'CONNELL. I meant that, in addition to our own manufacture through Ormet, our plans call for purchasing additional pig from other producers, and in addition to that, in addition to manufacturing into fabricated products, to the extent we have fabricating facilities, selling pig as well.

Mr. YATES. Of course, this depends on the work in your fabricating facilities doesn't it?

Mr. O'CONNELL. It depends on what?

Mr. YATES. On the extension of your fabricating facilities, the buying of pig?

Mr. O'CONNELL. That is correct.

Mr. YATES. Do you propose to buy scrap, too?

Mr. O'CONNELL. No, we don't.

Mr. YATES. You don't think that Olin will enter the scrap market?

Mr. O'CONNELL. I think it is customary to purchase the scrap which is generated by the material you sell, and this is what has historically been done, we would buy scrap to that extent, but as far as purchasing scrap, that is not generated by our customers from our supply of material to them ——

Mr. YATES. You will not purchase it on the open market?

Mr. O'CONNELL. We would not.

Mr. YATES. Could you contemplate entering into toll arrangement with your customers?

Mr. O'CONNELL. I think we should be further in the business before I answer that question. I understand that it is quite common to purchase the pig generated from our own shipments by converting it back into a usable product, and this is simply the same as buying a customer's generated scrap.

Mr. YATES. Do you have a contract for the purchase of pig from any other producers on a long-term basis?

Mr. O'CONNELL. Yes, we do.

Mr. YATES. Which of the companies?

Mr. O'CONNELL. With Alcoa, with Kaiser, with Alcan, and with Anaconda.

Mr. YATES. Do you have other contracts for long-term purchases of pig with any producers?

Mr. O'CONNELL. We do not.

Mr. YATES. Are those contracts priced at the published price?

Mr. O'CONNELL. They are.

Mr. YATES. Olin buys other metal, does it not?

Mr. O'CONNELL. Not on a long-term basis. The other metal, important metal that Olin uses, is copper.

Mr. YATES. You do not buy that on a long-term basis?

Mr. O'CONNELL. Generally not.

Mr. YATES. Do you pay the market price for that—do you pay the market price on the day of your sale, or does your contract provide for the fixed price?

Mr. O'CONNELL. You are speaking of copper?

Mr. YATES. Copper.

Mr. O'CONNELL. It is the day of delivery, as I understand it.

Mr. YATES. Do you mean the published price on the day of delivery?

Mr. O'CONNELL. I think so; I am not too familiar with copper operations as such, but my understanding is that copper is bought on the basis of the price in effect on the shipment date.

Mr. YATES. Is this true of aluminum as well?

Mr. O'CONNELL. Our contracts provide for charging the market price on the date the material is shipped.

Mr. YATES. Not the date it is ordered?

Mr. O'CONNELL. It could be; I am sorry.

Mr. YATES. It might be a substantial difference. For example, if you ordered on one day, the price might go up to the time it was delivered?

Mr. O'CONNELL. It could. I think it is the date of the fixing of the order.

I might say, our aluminum contracts are exactly like any other aluminum contracts the existing producers have.

Mr. YATES. I must confess to finding the pricing arrangements for this type of contract to be unusual, in the sense that your producers fix their price—"establish their price" perhaps is a better expression than "fixing their price"—and the customers pay the price, whatever it may be, at the time that their seller fixes the price. Ordinarily, when you enter into a long-term contract, you state what the price should be. For example, in the contract that the Government recently entered into with Freeport Sulphur for the purchase of nickel, it was a price over a period of 6 years of 74 cents a pound. I don't know which of these two contracts is the usual one, but I must say that this idea of fixing price at published price and then that price being set by the producer is an amazing arrangement.

Mr. O'CONNELL. I would say the nickel contract was the unusual one.

Mr. YATES. At a fixed price?

Mr. O'CONNELL. Yes.

Mr. YATES. You stated that your copper was purchased at the price on the date of order.

Mr. O'CONNELL. I think the day you ordered it, the day you buy it.

Mr. YATES. Do the suppliers of copper establish a market price?

Mr. O'CONNELL. I do not think I am qualified to answer that question.

Mr. YATES. You make reference on page 8 to your larger customers. Would you tell us who some of your larger customers are? You use the phrase "larger customers." It is at the end of paragraph 7.

Mr. O'CONNELL. Where, sir?

Mr. YATES. You have the second paragraph on page 8, the last sentence of that paragraph, you say:

Our large customers frequently do not require such services, for they are able to do it for themselves.

What companies do you mean by that?

Mr. O'CONNELL. By this we would mean an industrial customer who is a consumer, a large electrical company, a large automotive company, that sort of a company rather than the smaller fellow who takes your product and further forms it and makes an end product and distributes it.

Mr. YATES. Is molten metal a different product, if it has the same chemical composition as the solid product?

One of the discussions we have had with people in the aluminum business in earlier sessions—you may familiarize yourself with it by reading the transcript—is whether molten metal of a certain chemical content is different than pig. What is your feeling about it?

Mr. O'CONNELL. I do not think I have given it very much thought, because the discussion I had outside of the company on hot metal was a very short one, and it did not fit into our plans at that time. Our use of hot metal is simply from one of our plants to another of our plants, and we just do not go through an unnecessary operation as we are geographically situated. I really do not have an answer to your question.

Mr. YATES. Well, Mr. Burton who appeared before the subcommittee yesterday compared the molten metal with the jelly made by the housewife. He said if you served the jelly in the hot state, it would still be the same jelly as if it were allowed to cool.

Mr. O'CONNELL. My thought would be that would be something that could not be shipped, except a small distance over a fence to a facility capable of using it hot, such as our situation at ORMET which would be different from a material that could be stacked on a railway car and shipped a thousand miles.

I heard Mr. Burton, and I remember the jelly incident. I would hate to eat one.

Mr. YATES. You would hate to what?

Mr. O'CONNELL. I would hate to eat the hot one.

Mr. YATES. The hot jelly?

Mr. O'CONNELL. The hot jelly.

Mr. YATES. Suppose it were warm, before it solidified. I remember when my mother made jelly, I used to go after it before it was cool.

Mr. O'CONNELL. I have never tried it; I have gotten along well on the solid.

Mr. YATES. If there are no other questions, we thank you for your testimony, Mr. O'Connell. I am sure that we will see each other again, and we will be glad to receive whatever advice your company sees fit to give.

Mr. O'CONNELL. I will send the information on the necessity certificates in detail.

(The information referred to is as follows:)

I. OLIN MATHIESON CHEMICAL CORP.

Necessity certificate No. TA–NC–23259 (75 percent).
Fabricating plant, Omal, Ohio.
Plant capacity covered by certificate, 60,000 tons per year.
Total plant capacity, 96,000 to 120,000 tons per year.
Total estimated cost, approximately $63,000,000.

II. ORMET CORP.

Necessity certificate No. TA–NC–23258 (85 percent).
Primary aluminum reduction plant, Omal, Ohio, and alumina plant, Burnside, La.
Plant capacity covered by certificate, 60,000 tons of aluminum per year out of a total capacity of 180,000 tons.
Total estimated cost, approximately $112 million for aluminum plant, and approximately $56 million for alumina plant.

III. ORMET GENERATING CORP. (SUBSIDIARY OF ORMET CORP.)

Necessity certificate No. TA–NC–30814 (70 percent).
Two electric-power generating units, Cresap, W. Va.
Generating capacity covered by certificate, 225,000 kilowatts (one unit).
Total generating capacity, 450,000 kilowatts (two units).
Total estimated cost, approximately $56 million.

Mr. YATES. Thank you very much. Also, you are going to tell us about the mill costs at such time as you think you will have an idea about it.

Mr. O'CONNELL. We would be very happy to.

Mr. YATES. Thank you.

The committee stands in recess until further notice.

(Whereupon, at 2:30 p. m., the hearing was recessed until further notice.)

ALUMINUM INDUSTRY

TUESDAY, APRIL 29, 1958

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON MINERALS AND
RAW MATERIALS OF THE SELECT COMMITTEE
TO CONDUCT A STUDY AND INVESTIGATION
OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10:35 a. m., in room 1304, New House Office Building, Hon. Sidney H. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates, Evins, Sheehan, and Riehlman.

Also present: Irving Maness, counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The committee will come to order.

Is Mr. Harvey here?

Mr. HARVEY. Yes, sir.

Mr. YATES. Mr. Harvey, we are delighted to have you. Will you take the witness stand?

This hearing is a continuation of the hearings that have previously been held by Subcommittee No. 3 of the Select Committee on Small Business. This is the first of the continued hearings.

We will proceed today and tomorrow with other witnesses.

Mr. Harvey, the committee would be delighted to receive your statement.

TESTIMONY OF LAWRENCE HARVEY, EXECUTIVE VICE PRESIDENT, HARVEY ALUMINUM CO.

Mr. HARVEY. Thank you, sir.

Mr. Chairman, I am happy to be here today. We are always willing and anxious to cooperate with this committee whenever we are able. Your invitation to appear as a witness before this committee asked for information on the future of the aluminum industry and the position of small business in that industry. Before I speak on these two points, I would like to say, as you already know, we hope to become a primary producer in the United States and we are constructing a reduction plant at The Dalles, Oreg., on the Columbia River.

We are in a state of transition from becoming an independent nonintegrated fabricator, to an independent integrated producer. So, Mr. Chairman, I ask that you keep in mind our present position, because since we are not yet operating as a primary producer, we are not yet supplying metal to independent fabricators and consequently we have no basis for compiling figures either in the role of small

business in our aluminum industry or in the industry generally as viewed from the position of the primary producer.

I think I should emphasize that we undertook to become a primary producer of aluminum as part of the Government's program to obtain additional aluminum capacity for defense purposes, and to bring new independent companies into the primary metals field.

To the extent that we succeed, the Government, too, will succeed in its program. I believe that the entry of a new producer in the primary aluminum field can have a salutary effect upon small business. We can all recall that the aluminum industry had a single supplier of primary metal less than two decades ago.

Within the last decade and a half this number was increased to three. Concomitantly, there was a great increase in the number of independent fabricators due to the increased availability of metal.

Now in a short time there may be six or more prime producers in the industry and we can expect even wider benefits for small business. The current minor adversities in our national economy have had their effect upon the aluminum industry. However, long-term optimism is justifiable.

Aluminum is being offered for more and more commercial uses and where one market, the automobile industry, for example, has felt the effects of declining production, demand for aluminum for building activity and appliance manufacturing has held up fairly well.

When the current period has run its course, the greater total availability of primary metal will have, we strongly believe, convinced many users that they can design to the use of aluminum with the assurance that metal will be available for their requirements.

One of the great sustainers of continued optimism in the aluminum industry is the fact that we have not yet really begun to explore all of the metal's application. I do not know of any major company including our own that does not have a large investment in time, money, and manpower in researching and designing new uses for aluminum and the materials and methods application.

I might also add that the work of product engineering is additional assurance that there will always be a place for small business in this industry. Each new application discovered and each new manufacturing process devised is an invitation to small business to participate somewhere in the process of manufacturing or distribution.

We shall always be cognizant of small business because our company had its origin as a small business. Harvey Aluminum was started as Harvey Machine Co. by my father, Leo M. Harvey, 45 years ago in Los Angeles in the days before men and machines conspired to make metals and metal products a foundation of our industrial society.

In his words, those were the days when he took on a job with a lot of confidence and a hope that he could invent something to turn out pieces in good shape and fast enough to meet a customer's requirements.

During three decades through World War I and through the Nation's worst depression, we applied our resourcefulness and the resourcefulness of the engineers and workers who joined our company. We found no quick slogan for success. By continuous hard work and by the application of engineering skill and the technique of applying

distinctive production processes to production problems, we grew in size to a corporation that required three separate plants to house its activities during World War II.

We have worked constantly to develop better designs, new alloys, and new and better methods of manufacture.

As World War II had its effect upon the Nation's industrial habits, it also affected us. Our experience in the field of aluminum during World War II encouraged us to select this industry as a major area of expansion.

In 1946 we consolidated our three plants into its present headquarters at Torrance, Calif.

Within a decade of producing aluminum extrusions, forgings, structurals, rod and bar, impact extrusions, and other aluminum products for commercial and military customers, we became the Nation's leading independent producer of aluminum rock mill products, and, Mr. Chairman, we have discovered that since we could go no further as an independent, the only course open to us was to become a primary producer. Although the decision was an obvious one, it was not easy to make, for we knew that unlimited difficulties lay before us.

Almost 10 years ago in anticipation of some day attempting to become an integrated producer, we built and operated an experimental reduction system at our plant in California. We used the experience and knowledge we gained from this work as a launching platform. We sent engineers around the world to study the newest techniques and methods. We have had chemists and metallurgists at work on our reduction project. We compiled many volumes of memoranda, graphs, charts, blueprints, and so forth, and then we set about initiating construction. As presently designed, the plant at The Dalles incorporates all of the most modern engineering and design features available in the Western World.

As a consequence, we hope to operate the most efficient and economical reduction plant constructed on the North American Continent.

In slightly more than two score years, we have labored in the field of free enterprise economy and enjoyed its fruits and we wish to serve that economy as a primary aluminum producer.

Mr. YATES. Thank you for your statement, Mr. Harvey.

I notice that you are executive vice president. Are you an engineer or a finance man or attorney? What is your profession?

Mr. HARVEY. I am chairman of the board of the corporation, executive vice president. I hold degrees of Bachelor of Science, Bachelor of Laws and Master in Business Administration.

I belong to the technical society in both industries.

Mr. YATES. How long have you been with this company?

Mr. HARVEY. With Harvey Machine, now the successor corporation to the partnership that previously existed between my father and I. It has been for about 25 years now.

Mr. YATES. You have grown up with the business?

Mr. HARVEY. Yes; I have.

Mr. YATES. On page 4 of your statement, you say,

> And Mr. Chairman, we discovered that since we could go no further as an independent, the only course open to us was to become a primary producer. Although the decision was an obvious one, it was not easy to make for we knew unlimited difficulties lay before us.

The implications of that statement are that you knew that you were limited in further activity as a fabricator without having a source of primary metal, is that correct?

Mr. HARVEY. That is right, sir.

Mr. YATES. Does that mean that there is no hope for fabricators who do not make their own primary metal in the aluminum industry?

Mr. HARVEY. No; that is not the conclusion.

Mr. YATES. Why was that true of you and not true of the others?

Mr. HARVEY. I think the point of time is an extremely important concept. At the time that we were interested in the primary business and began the construction of our program and the implementation of it, it was a period in which the availability of metals supplies was extremely restricted because of lack of productive capacity on the North American Continent, and because of the great industrial development and the great industrial materials and methods application of aluminum as an end product, and its resultant use, and because of, at that particular time, the productive capacity of the industry, there was always a continuous shortage of the material.

Mr. YATES. Are you in that position today? Would you think twice about becoming an independent producer?

Mr. HARVEY. I do not think we would change our opinion, sir.

Mr. YATES. Doesn't that negate your previous statements then?

Mr. HARVEY. No. We are committed to the program of integration. It is a commercial desire. It is our considered opinion and I believe it is the opinion of the Government that from a military defense point of view, that the productive capacity of this country in event of a national emergency is not sufficiently great to supply all the material within the time required to produce materials, and for that reason, we will have a tight market in the event of a national emergency. And since we are supported on that basis, and since we have always taken an active interest in the national defense, we believe it is essential to have a productive capacity in the North American Continent adequate to take care of that emergency.

Mr. YATES. Our information indicates that your company went into business with certain attached amortization certificates and with the assistance of Government research contracts.

Could you have gone into the aluminum producnig business without such assistance?

Mr. HARVEY. I do not think so.

Mr. YATES. And if a fabricating company wanted to do the same thing that you did, to go into business, it would ordinarily need some kind of Government help in order to engage in the manufacture of primary metal?

Mr. HARVEY. I would believe so, to be in an equal competitive position.

Mr. YATES. We were surprised when the Anaconda Co. appeared before us and told us it had purchased your tax amortization certificate. How did this happen? How did it happen that Anaconda was able to purchase your certificate and then you were able to obtain another one? Can you give us some of the history of what transpired?

Mr. HARVEY. That is quite a number of years back and it is taxing my memory to recall it all, but if my memory serves me correctly, they did not purchase the tax amortization certificate from us.

The certificate which had been issued to us covering the Montana operation was canceled at our request and then a new certificate was applied for by a subsidiary company, at that time owned by Anaconda, and then they applied and received a certificate of necessity in the name of the new company, which bore the same name as our name, because we were then partners with them in the project. And then subsequently, the name of that company was changed to Anaconda, and if they did give you that impression, I think it is in error.

Mr. YATES. As I remember the testimony, that company gave you some stock?

Mr. HARVEY. That is correct.

Mr. YATES. My impression was that you received the stock for your interest in the amortization certificate.

Mr. HARVEY. No.

Mr. YATES. Is that an erroneous assumption?

Mr. HARVEY. It is an erroneous assumption. If they did give you that impression, it is erroneous.

Mr. YATES. What contribution did Harvey make to that company?

Mr. HARVEY. That company—let me go back. The engineering concept, designs, drawings, contracts for materials of all kinds, character and description were placed by the Harvey Co., and it was very difficult to secure what we call scheduled deliveries within time to construct the plant, and it was of the utmost importance to have the plant constructed as soon as possible. And they bought from us land, designs, engineering, contract commitments, and assumed and agreed to undertake certain obligations and made certain other commitments of a commercial and private nature in connection with the transaction and there was a very substantial value that was transferred at that particular time. I have here a copy of the Defense Production Administration letter dated I think it is February 18, 1953, which refers to Harvey Machine Co. of Montana, and says, "Pursuant to the defense regulations"—which was the request of Anaconda Co. at the time, they said, "substituting in its place the following name: Anaconda Aluminum Co."

As a technical matter, Harvey Machine of Montana was changed to Anaconda Aluminum Co. because they were the principal stockholders and desired to have the subsidiary in the same name as the parent.

Mr. YATES. Is that the letter dated February 18, 1953?

Mr. HARVEY. Yes, sir.

Mr. YATES. You stated that your tax amortization certificate was canceled upon your request. When was that done?

Mr. HARVEY. I do not recall the exact date.

Mr. YATES. Was it before this or after this?

Mr. HARVEY. It was done before this.

Mr. YATES. Is it Harvey Aluminum or Harvey Aluminum Co.?

Mr. HARVEY. Harvey Aluminum (Inc.).

Mr. YATES. Is Harvey Aluminum (Inc.) a publicly owned company?

Mr. HARVEY. No, it is a privately held company.

Mr. YATES. There is no stock outstanding other than—no stock selling to the public?

Mr. HARVEY. No, only the original founders of the company. It is one of the few proprietary-owned companies in the aluminum industry, or the only one as far as we know.

Mr. YATES. Have you begun production yet? The last letter I received from your company indicated, I thought, that you were on the point of——

Mr. HARVEY. We are scheduled to be producing metal in the last quarter of 1958.

Mr. YATES. During the last quarter of 1958?

Mr. HARVEY. The last quarter of 1958.

Mr. YATES. Are you engaged in business at all at the present time? Do you buy scrap? Do you enter into contracts?

Mr. HARVEY. Yes, sir.

Mr. YATES. Is the answer to both of those questions yes?

Mr. HARVEY. Yes.

Mr. YATES. Then you are now buying scrap?

Mr. HARVEY. Yes, sir.

Mr. YATES. You are storing it for the time when your furnaces are burning or are you buying as a broker?

Mr. HARVEY. No; we are buying only for our own use.

Mr. YATES. Only for your own use?

Mr. HARVEY. Yes, sir.

Mr. YATES. Under the terms of your contract with the Government, which was dated September 30, 1955, the Government undertakes to purchase from you all the aluminum that you do not sell in the open market; is that correct?

Mr. HARVEY. Yes, sir. The contracts are identical with those issued to Kaiser, Alcoa, and Reynolds, as I understand it.

Mr. YATES. When the other primary producers appeared before our subcommittee, I asked them whether they thought that the purchase and use of scrap in their ordinary business, at the same time exercising their tender rights to the Government, was not in a measure comparable to the importation of aluminum and still exercising their tender rights to the Government in such a way as to provide for an unnecessary burden to the Federal Government.

Would you like to answer that question? Do you consider the purchase of scrap at the same time exercising your tender rights is not an unnecessary burden on the Federal Government?

Mr. HARVEY. I do not think you can answer that directly with a "yes" or "no" answer. I think each problem has to be evaluated upon the particular facts in the instant case, and there might be a number of——

Mr. YATES. You understand what I am talking about?

Mr. HARVEY. Yes, I do, sir.

Mr. YATES. The contracts of the three original contract producers were amended voluntarily with the Government to provide for a deletion from their tender rights of the amount of their imports.

Mr. Hickman of Alcoa thought that scrap was on the same basis as those aluminum imports.

Do you agree with that opinion?

Mr. HARVEY. I cannot tell for his individual company. If it were our company alone without regard to the rest of the industry, I would answer that it depends upon the particular requirements at a set time.

Let me explain to you what I mean by that. Scrap is the normal

byproduct of the sale of your aluminum or your ordinary mill products, and it is a common practice in a great many nonferrous metals industries to recover scrap from the customer, and it is a method of merchandising and a method of handling it. In some instances the material will be purchased directly from the customer, and in others, to avoid dislocation of an established market or method of merchandising, they will buy through a dealer or wholesaler or a scrap assembler, through very small businesses who make a business of collecting scrap.

Though they may not buy the identical customer's scrap back, they might buy a like or similar quantity proportionate to the amount that normally had been generated by their customers. So that is part of the consideration that must be evaluated.

If they bought an unusually large proportion of the total sales, and had a different motive in mind, I think it is the intent and the practice rather than the simple statement yes it is, or no, it is not.

I think it is something that the Government itself has the responsibility of determining whether or not it does affect their purchases.

Mr. YATES. What is the capacity of your plant? Is it 80 million pounds?

Mr. HARVEY. It is 54,000 tons per annum. That is 108 million pounds per annum.

Mr. YATES. 108 million pounds, and that is its annual production?

Mr. HARVEY. That is right, sir.

Mr. YATES. And under the terms of your contract with the Government, the Government agrees that you will be able to sell 108 million pounds, is that correct? If you aren't able to sell that on the open market, it would take whatever surplus that you are unable to sell?

Mr. HARVEY. That is my understanding, sir.

Mr. YATES. Will the amount that you melt and sell through your scrap purchases be deducted from that figure?

Mr. HARVEY. There is no commentary in the contract about it.

Mr. YATES. As you understand the contract, would you say that it would be deducted?

Mr. HARVEY. No, it would not be.

Mr. YATES. So that the 108 million pounds that you produce would be augmented by the amount that you were able to produce and sell through the form of scrap?

Mr. HARVEY. No; we are not in the business of buying and selling scrap material and producing it for that purpose, sir.

Mr. YATES. But you will be?

Mr. HARVEY. No; we do not buy material for sale to others. In other words, we do not buy scrap for the purpose of reducing it into pig to sell to others. The plant at The Dalles is a plant for the production of what we call primary pig and ingot and not for the purpose of producing any other materials there.

Mr. YATES. I must confess I am a little confused. You are purchasing scrap but you only act as a broker for your scrap purchases?

Mr. HARVEY. No, sir.

Mr. YATES. Or will you use it in connection——

Mr. HARVEY. What you refer to, we purchase scrap currently for the production of our fabrication division.

Mr. Yates. I see.

Mr. HARVEY. In that sense we do use the scrap material which we buy from our customers or buy from regular dealers who are established for that purpose.

Mr. YATES. I see.

Will you then use primary? The primary metal you produce for your fabricating division?

Mr. HARVEY. We intend to do so.

Mr. YATES. And you will also use scrap for your fabricating business?

Mr. HARVEY. To the extent that it is required in our normal commercial relationship to do so.

Mr. YATES. Did the recent reduction in the price of primary metal hurt your company?

Mr. HARVEY. Any reduction in the gross income injures a business. What the cumulative effect is, one cannot tell because price in the normal market goes up and down and it is something that one would expect reasonably anyway.

Mr. YATES. The answer is yes, then?

Mr. HARVEY. The answer is yes and no.

Mr. YATES. I gathered the impression from what you said that inasmuch as this is a reduction in price, that will result in loss of gross income, that it will be hurtful. Now how will it be helpful? You said the answer is yes and no.

Mr. HARVEY. If the price remains permanently low, yes, it will be harmful because the total gross income in relationship to costs would be reduced. If it is only a temporary measure, then it is not material to us because in the normal market place your prices are always moving.

Mr. YATES. Will your company make money at the 24-cent price?

Mr. HARVEY. It is our opinion it will.

Mr. YATES. So that it won't be hurtful.

Mr. HARVEY. "Hurt" is a relative term. Yes; we would like to make more money. Yes; we will make enough money to have a satisfactory investment.

Mr. YATES. Does your company intend to go into the socalled hot metal business such as Reynolds Aluminum?

Mr. HARVEY. We have no present plans to go into such a program.

Mr. YATES. Do you estimate that this will be a growing part of the aluminum business, where more and more companies will go into hot metals?

Mr. HARVEY. I am not familiar enough with the primary reasons for customers entering into hot metals contracts.

The only thing I noticed is that the hot metal contracts have been more or less confined to the automotive industry, an industry which has been noted for its attempt to reduce raw material costs.

Mr. YATES. Your statement indicates that you have an optimism for an upturn in business.

Do you see that in the near future?

Mr. HARVEY. Yes, sir.

We note in our own business that there has been a marked upturn in incoming orders beginning sometime back in February, and that there has been——

Mr. YATES. Orders for primary metal?

Mr. HARVEY. I am talking about our own business. That means the fabrication end of the business.

Mr. YATES. Yes.

Mr. HARVEY. In the primary metal field in the long-term outlook we believe that by about 3 years from now, or even sooner, that the industry may again require additional expansion in the productive capacity of this country to meet the normal growth of demand.

Mr. YATES. Do you find yourself having been squeezed as a fabricator as a result of purchases of scrap by the primary producers?

Mr. HARVEY. No; we have had no such difficulty.

Mr. YATES. Information has been furnished to the committee that Alcoa is undertaking a plan, a scrap repurchase plan for turnings and borings generated by screw machine operators. The plan includes four alloys, 2011, 2017, 2024, and 6061 for screw machines which they propose to purchase at 0.1657 per pound loaded cars or trucks f. o. b. shipping point.

Mr. HARVEY. How much a pound, sir?

Mr. YATES. 0.165, sixteen and a half cents.

Mr. HARVEY. 16½ cents?

Mr. YATES. Yes; I understand that that may be substantially above the current market.

Would that serve as a price squeezing tendency for a fabricator?

Mr. HARVEY. Well, from my experience in the screw machine trade, I think it might be a stimulus to the sale of the material rather than a price squeeze.

Mr. YATES. Sales of what material?

Mr. HARVEY. Sale of what we call screw machine bar stock. Not many of the independents produce screw machine bar stock so far as I know. We are one of the few as far as I know that are major producers of what we call screw machine rod. It is true that the turnings and borings sell for a lower scrap price, but that depends upon the area in which they are produced, the transportation factors involved, the contamination of the material, the alloy that is involved.

Mr. YATES. What happens to the smelting industry which purchases at these prices?

Mr. HARVEY. I guess they have to pay more for the raw material.

Mr. YATES. I think that follows. Is there any other result in the smelting industry? The smelting industry is pretty well squeezed by having to compete on that basis, isn't it?

Mr. HARVEY. I am not in the smelting business, and once in a while I talk to the smelters. Smelters are a group unto themselves. Our basic opinion is that the more aggressive and the more able technically are those that have succeeded and are succeeding, and those that are less able businessmen are not succeeding as well as they think they should.

Mr. YATES. Has your opinion changed since you became a producer?

Mr. HARVEY. No; it has not.

Mr. YATES. You say your fabricating business has begun to turn up. How badly were you hit? How much off were you from last year?

Mr. HARVEY. I do not have the figures in front of me, but it appears to me that the year 1958 will probably wind up as far as tonnage is concerned as good as 1957.

Mr. EVINS. Mr. Harvey, I think that this committee and I know certain individuals of the committee have admired you and your company for its independence as a small concern and its growth.

You have expanded now into three manufacturing fabricating plants. Have you reached the peak in the level at which you are just going along now with the big boys in the industry, and you are setting your pattern along the line that the Government tells you and your competitors, or are you going to forge ahead with increased fabrication?

Mr. HARVEY. I think that our history of what we have actually done over the past 45 years since the business has been founded, and what we have done in the last 2 decades in the aluminum industry, speaks for itself.

We will rightfully assert our independence. We always have. We have been notorious for being rugged individualists.

We believe in the free-enterprise system. We believe in capitalism and we intend to see that it works.

Mr. EVINS. That is a fine statement. Your history has been good, but I rather gained the impression from your testimony that you had reached the point where you could not longer be independent and become a primary producer, and you sort of integrated your operations in with that of Anaconda and the big ones, and your figures and price situation has gotten now where if it goes down a little bit, it doesn't hurt you too much.

That is the general picture that one might get.

Mr. HARVEY. I am sorry if I conveyed that impression. It was not my intention.

Mr. EVINS. I want to commend you for your spirit of independence and your free-enterprise system and rugged individualism.

I hope that you can continue to expand your fabrication and reach a production not only for defense but for the industrial needs of this Nation.

That is all, Mr. Chairman.

Mr. YATES. Mr. Sheehan.

Mr. SHEEHAN. Mr. Harvey, from a partisan Republican standpoint, I am happy to hear that business is on the upturn in 1958 as well as 1957.

In becoming a primary producer, are you dealing in any primary metal now, at the present time, reselling it or jobbing it?

Mr. HARVEY. No, sir.

Mr. SHEEHAN. In other words, all the primary metal you buy you use in your own fabrication?

Mr. HARVEY. That is right, sir.

Mr. SHEEHAN. I notice you have some reference here to small business. You state in your statement that you have no basis for compiling figures on the role of small business, but then you go on to say that your entry should have a salutary effect on small business. How would that happen?

Mr. HARVEY. Well, in a number of ways, sir. Example is always a great stimulus, and one of the great problems in business is the psychological approach to business. If you are optimistic, you are willing to forge ahead and assume a risk.

If you are pessimistic, you are not.

For example, in our economic system today, you will note there is a great play upon the attempt to stimulate business by putting busi-

nessmen in the proper frame of mind to buy, and the consumer in the frame of mind to buy.

The example that we were able to achieve in this country, the development of an independent company without being a giant financial corporation, and to succeed on our own and under the support of the Government and the protection of committees such as this, to develop a business is a stimulus to all small businesses.

An additional source of supply over the current source of supply is always a stimulus to a small business, and under the terms of our contract with the government, which we intend to faithfully discharge, a very substantial portion of the production of The Dalles reduction plant will be sold to nonintegrated independent fabricators, and thus constitute a new source of material and a new source of support for them, so that they have that mental freedom and that freedom of movement in a commercial sense to develop a market and know that they will be supplied with raw material, even under adverse circumstances.

Mr. SHEEHAN. However, your growth, it seems to me, has been predicated upon the fact that you could get government assistance to help you build your plant, both in the way of a contract and in financial help.

Mr. HARVEY. Are you talking about The Dalles reduction plant, sir?

Mr. SHEEHAN. Yes.

Mr. HARVEY. That is correct, sir. It is the same aid that has been given to the aluminum industry and the copper industry and the aircraft industry and many other industries.

Mr. SHEEHAN. What I was leading to was the conclusion you could do it maybe and several of the big boys could do it, but the various and many small fabricators couldn't go to the government and get a contract and build a plant with government help.

Therefore, they don't have the same source of help, both financial and selling to the Government, that you have.

Mr. HARVEY. It depends upon the Government program available at that particular time, and the administration policy in fostering independent and small business.

Mr. SHEEHAN. The Government program at that particular time, as I understand it, was merely to get enough aluminum for the stockpile, and once those goals are reached, the Government obviously will have no further interest in expanding aluminum production, because the defense needs are met.

Mr. HARVEY. That is right, sir.

Mr. SHEEHAN. So, therefore, unless similar circumstances should come about, there is not much prospect of any other small fabricator getting the help that, for instance, your company has had.

Mr. HARVEY. I don't know. It is possible, because we originally programed a very small plant, a reduction plant, prior to the Korean conflict, which would have been entirely financed and supported independently of any Government aid or assistance.

But once Government aid and assistance is granted to your competitor, you are no longer equally competitive until such time as you have the same aids or assistance that your major competitors have.

And all the larger corporations were, because they were better organized and had available to them the opportunity as large cor-

porations able to take advantage of these things which the smaller corporation, not so well organized or as well financially backed or without the resources, was not able to take advantage of.

Mr. SHEEHAN. You give us a very good viewpoint there, and I might say that many of us in Congress are hopeful of the progress and preservation of small business.

Unfortunately, they don't have the facilities to take advantage of some of the Government programs, and, therefore, they are sort of left by the wayside.

Your presently designed plant in The Dalles, when will that be ready?

Mr. HARVEY. In the last quarter of 1958.

Mr. SHEEHAN. Would you care to give us a rough idea in round figures as to how much that plant is going to cost?

Mr. HARVEY. We haven't totaled the full figures and I just don't like to look at it because it is so much money it scares me at times, but it is a substantial figure.

We don't know the exact costs yet, because there is still quite a number of months yet to go on the completion of the plant, but we hope that we will be able to complete the plant at a capital cost per ton of output lower than that of any other recently completed North American producer.

Mr. SHEEHAN. Without being an expert in aluminum, that wouldn't mean too much to me. I would just hope you would give us a rough round guess as to what the total cost is, and the only reason for asking that question is that I just want to see if a modern aluminum plant is anywhere within the grasp of a small-business man.

Mr. HARVEY. The order of magnitude would be in the $50 million category.

Mr. SHEEHAN. $50 million, you say?

Mr. HARVEY. In that category; yes sir.

Mr. SHEEHAN. We are talking about rough round figures.

Mr. HARVEY. That is right. But there are different sized plants that can be built.

I have been in plants in different parts of the world in which the capacity has been approximately one-tenth the size of this plant.

Mr. SHEEHAN. Well, could somebody in America build an aluminum plant to turn out primary metal at one-tenth the cost of this, $5 million, and compete successfully with the big boys?

In other words, turn out his aluminum at a cost price so that it would be competitive?

Mr. HARVEY. I think it depends upon—it is possible if a man has all of the fortuitous circumstances in order to be able to effectuate a program of that kind.

It could be done if the person were ingenious enough, had the engineering background, the skill and the ability, the particular sites or location, availability of power, raw materials available to many and a host of circumstances.

Mr. SHEEHAN. You would have to be pretty much of a genius pretty near to having everything going your way.

Mr. HARVEY. They said nobody could build a reduction plant except one company and I think five other companies have demonstrated there is no monopoly on genius in the American scheme of business.

Mr. SHEEHAN. You made a notation in your statement that you were the Nation's leading independent producer of aluminum mill products, and I believe in response to Mr. Yates, you said one of the reasons for going into primary production was because of those shortages at that time.

Do I interpret that remark correctly, that it is hard to get aluminum?

Mr. HARVEY. Yes, sir.

Mr. SHEEHAN. And, therefore, you are going in to compete with the big three on a primary production basis?

It seems to me, I am drawing a conclusion at least, that you have done that also to protect your fabrication.

Mr. HARVEY. Yes, sir.

Mr. SHEEHAN. Fabrication plant; is that right?

Mr. HARVEY. Yes, sir.

Mr. SHEEHAN. In other words, I could draw the conclusion when you said 3 years from now you might be or the country might be in trouble because of a shortage of aluminum, you want to make sure that you are going to get your share of aluminum at all times, and that is why you decided to become a fully integrated company rather than remain just a fabricator; is that right?

Mr. HARVEY. That is one of the objectives, sir.

Mr. SHEEHAN. What are the other objectives?

Mr. HARVEY. To be independent and not pay tribute to anyone else.

Mr. SHEEHAN. I must compliment you for that, because we are always happy to see people forge ahead and be independent so they are not dependent for their business on someone else's ability to produce or to sell end products.

That is all, Mr. Chairman.

Mr. YATES. Mr. Riehlman.

Mr. RIEHLMAN. Mr. Harvey, somewhere in your statement you referred to the possibilities in the next few years that there will be six primary producers in the United States of America.

Mr. HARVEY. Yes, sir.

Mr. RIEHLMAN. That is a possibility. Now as you go into the primary production of aluminum, and as you have answered the question asked by Mr. Sheehan here, you are doing it to protect your own fabricating interests so that you will always have available the primary metal that you need for production.

Now, what is going to happen if all six of these primary producers start to expand their own fabricating facilities?

Isn't there the possibility that they are going to be in keen competition with small business throughout the Nation, and that there will be less opportunity for the small fabricator to capture the market?

Mr. HARVEY. There are times when that situation could prevail, sir.

Mr. RIEHLMAN. Isn't it a good possibility that that may be one of the things that we might have to fear in companies like yourself being independent, but wanting to get in so that you have the primary metal that you need to carry on your own activities and expand them, and maybe the other primary producers will do the same thing. And as you expand, you are going to be bound to get in to try to capture the market in the fabricating end, which the small fabricators are vitally interested in.

Mr. HARVEY. I think it depends upon the corporate policy, sir, what one does.

I think it will be a number of years before we would even have a corporate policy that would be akin to your statement. I think that the primary problem that faces the independent fabricator today is even a more serious threat than that.

We note from reports that we have from abroad, and the other day I had the opportunity of talking to a representative from Europe of one of the principal aluminum associations, and that is the policy of Soviet Russia in engaging in economic warfare and using aluminum as one of its instruments in the economic warfare scheme.

They have publicly announced that they will, no matter what the price or cost to the western democracies, sell aluminum in the country that they want to sell below whatever mill product price, whether it be pig or any other end product in the primary business, they will sell it below the then current price in that country.

For example, in Great Britain today, they are offering Russian pig, and they are buying Russian pig at a rate that amounts to approximately 20 percent of the annual consumption in Great Britain.

The price at which it is offered is at 1.37 cents less per pound than that of a British producer or one in the British Empire, or the equivalent purchase from a United States producer selling in Great Britain.

Mr. YATES. What is that price?

Mr. HARVEY. Whatever the price is in Great Britain.

Mr. YATES. What is the price at the present time?

Mr. HARVEY. In Great Britain?

Mr. YATES. Yes.

Mr. HARVEY. The British price is 24.3, I think.

Mr. YATES. Which is above what our price is?

Mr. HARVEY. It is the delivered price. They recently reduced the price.

I think the offering price in Great Britain is 22½ to 23, depending upon the delivery point and the f. o. b. point.

But the policy that I am trying to state, the point I am trying to make is this: they are offering material in East Germany, West Germany, Belgium, Switzerland, and in every civilized country of the globe where aluminum pig may be purchased and consumed as a normal commercial product, at prices below any western democracy producer, and since in Russia cost is not a factor, since labor is supplied by compulsion, they are able to offer the material in competition to any United States producer.

Then in the United States we suffer from a lowered cost of material, and the compulsion upon the western producer to dump material in this country to make up for his loss of market.

When that occurs, you substitute employment in the country of origin, it is a secondary effect, but you substitute employment in the country of origin for unemployment in this country.

We know, for example, on the west coast we don't have much foreign competition, but on the Atlantic coast, we have been advised that there are offerings of not only primary products, but products produced from primary products at anywhere from 10 to 16 percent below the normal price offerings of the ordinary producer at the market place.

And the net result is that his biggest threat from competition is going to come as an indirect result of this program of economic warfare by the Soviets.

This causes a demoralization in the ordinary established market, and I think the recent price break, although it may be denied by some, in part or perhaps even in large measure is directly a result of economic warfare of the Soviets.

If we permit it to continue, and we do not encourage our other western democracies as well as ourselves to stand up against such type of economic warfare, we do this country a disservice and assist the Soviets in their program of economic warfare.

I think that is a very critical and a very current problem in the aluminum industry, and it suddenly blooms overnight and a lot of companies may not be able as independent companies to sustain the shock and the delay in time necessary to receive remedial action, because of the time necessary to have hearings and other things, because the law may not then exist to prevent dumping.

For instance, the Canadians, as I understand it, have asked the British Board of Trade through their sales company to have the British Board of Trade invoke antidumping against the dumping of Soviet materials in Great Britain.

The board of trade, as far as I know, has taken no action on the subject matter, but it is a very important thing to consider, and I think very vital to the trade, and it will affect not only the primary independent producer of aluminum products, but it will also affect his customer, because we know, for example, one of the big markets in the extrusion products field is what we call openings, windows, sash, and things like that, and we feel that there are substantial offerings at cut price of those building products on the Atlantic coast.

Mr. RIEHLMAN. Fabricated in what country?

Mr. HARVEY. Fabricated either in Germany, England, Belgium, or Switzerland.

Mr. RIEHLMAN. What other types of items have you known that have been fabricated in other countries and are now exported to this country or imported into this country on the west coast?

Mr. HARVEY. On the west coast very little because of the transportation differential.

Mr. RIEHLMAN. Are you familiar with what is being imported on the east coast?

Mr. HARVEY. We do know that storm sash and windows are being offered on the east coast. We know that furniture tubing is being offered on the east coast.

We know that soft alloy sheets and circles have been offered on the east coast and we know that certain, what we call fabricated, stamped or pressed or impacted type of aluminum fabricated products have been offered on the east coast.

The quantity may be very small, but I have always believed in what I call preventive medicine. The time to take an action is not after the injury has occurred, but before the injury has occurred.

At the present time, it may not have a substantial effect, but you must anticipate what that effect is going to be.

Mr. RIEHLMAN. What remedial action do you recommend?

Mr. HARVEY. I believe that there should be congressional action to give the administration opportunity to vary either the import licenses or a duty against dumping.

I believe in free trade and I believe in a free exchange of trade, and I believe it should be encouraged to as large as possible extent to help underdeveloped countries and to help our neighbors trade with one another.

But the substitution of employment in one country as against unemployment in another, or the allowing of unemployment in this country because of Soviet tactics of economic warfare, I think goes beyond the normal realm of free trade.

And some antidumping measure that would preserve the employment in this country and the status of the independent producer should be taken—he has more at stake than a major company.

A major company can take a little financial belting now and then, but an independent company operates a little bit too close to the belly to be able to take much over.

Mr. RIEHLMAN. I have 1 or 2 other questions, Mr. Chairman.

Mr. Harvey, what is your total fabricating capacity in net tons at this time?

Could you give us that figure?

Mr. YATES. He is asking about your fabricating plant?

Mr. HARVEY. I hesitated a little bit because it is really a matter of private commercial concern and many of my competitors would love to find out how much business we do so they could go after our customers.

Mr. RIEHLMAN. May I ask this question? Do you anticipate expanding your fabricating capacities to any great degree in the near future?

Mr. HARVEY. In our Torrance fabrication for aluminum extrusions?

Mr. RIEHLMAN. Yes.

Mr. HARVEY. We do not intend any major increase.

Mr. RIEHLMAN. Other fabricating facilities?

Mr. HARVEY. We are establishing in The Dalles facilities for making what we call D. C. billets, so that the material can be purchased in that form by the independent people whom we supply billets to.

In other words, some people do not have the equipment to produce their own billets, which is the form in which they translate the primary metal prior to extruding it or rolling it. We will put in that sort of fabrication facilities.

Mr. RIEHLMAN. That is all, Mr. Chairman.

Mr. YATES. Have you any questions, Mr. Dalmas?

Mr. DALMAS. No questions.

Mr. EVINS. Mr. Chairman, I think it may well be concluded from Mr. Harvey's statement that he does not anticipate any shortage in the demand for aluminum on the domestic front, and because of the sputnik age in which we live, the rocket and missile age and the whole economic warfare which the Russians have announced and pressed forward, that you do not see any possibility of any shortage in the aluminum production field for several years to come, considering all the circumstances, both domestic and international.

Mr. HARVEY. With a combination of all elements; sir, yes.

Mr. Yates. I have a few more questions, Mr. Harvey. How did you finance your $50 million program?

Mr. HARVEY. Through private loans negotiated with the Bank of America, the Chase-Manhattan, the First National City Bank of New York.

Mr. YATES. Could you have financed them without the Government contract?

Mr. HARVEY. No, sir.

Mr. YATES. What about your source of raw material? Where do you get bauxite?

Mr. HARVEY. Bauxite is purchased in Malaya and transshipped.

Mr. YATES. Do you purchase it?

Mr. HARVEY. No, sir.

Mr. YATES. Then how do you make your aluminum?

Mr. HARVEY. Our aluminum is made from alumina which we buy from two Japanese companies.

Mr. YATES. You buy alumina from two Japanese companies?

Mr. HARVEY. Yes, sir.

Mr. YATES. Do you have long-term contracts with them?

Mr. HARVEY. Yes, sir; 5 years.

Mr. YATES. Does the fact that you do not have your own production resources for the manufacture of alumina permit you to compete with the other producers of primary metal?

Mr. HARVEY. We think it does, sir. Not as well as it would be if we had our own alumina plants.

Mr. YATES. What if there were a tariff on alumina?

Mr. HARVEY. A tariff on alumina, if there were a tariff on alumina, it would seriously injure us, there is no question about it.

Mr. YATES. There is what?

Mr. HARVEY. It would seriously injure us.

Mr. YATES. Doesn't your viewpoint with respect to the need for a tariff on primary metal really stem from Harvey as a primary metal producer rather than Harvey as a fabricator?

Mr. HARVEY. No, it stems from Harvey as a fabricator. When the price was reduced, it was only a reflection of the actual reduction in price that had already taken place in the primary fabrication of the product, and I think that most primary people were late in following the market in that respect. As far as the fabricator was concerned, he had established within the market, within the market place, a great many of what we call commodity prices.

In other words, he had priced his end product at a price that had developed the largest maximum trade for his own particular business, and the reduction in price I do not think stimulated the market at all, nor do I think it created any additional business.

What it did do temporarily is create a loss to the independent fabricator in his inventory on hand. If they were oversold by the primary company and therefore loaded up with an inventory, they lost their raw material inventory value, they lost their finished products value, and they lost their goods in process value by the current reduction in price.

Mr. YATES. But from what you have told us today, the fabricators' business is picking up.

Mr. HARVEY. Yes, sir.

Mr. YATES. So that this price reduction will be of benefit to them?

Mr. HARVEY. It won't be a benefit because the business picked up before the price changed.

Mr. YATES. Because of what?

Mr. HARVEY. Because the business picked up before the price change.

Mr. YATES. When did your business pick up?

Mr. HARVEY. Business picked up back in February.

Mr. YATES. Last February?

Mr. HARVEY. This last February, that is right, and the price change was effective April 1.

Mr. YATES. Is that because of Government purchasing?

Mr. HARVEY. Oh no.

Mr. YATES. What is it that you manufacture in your fabricating plant?

Mr. HARVEY. Rod, bar, tubing, pipe, impact, structurals, hand-forgings.

Mr. YATES. Who buys those?

Mr. HARVEY. Every kind of——

Mr. YATES. Who are your customers?

Mr. HARVEY. Every kind of industry you can think of. The automotive trade, building products trade, baby carriage people, all kinds of miscellaneous equipment.

Mr. YATES. Is business turning up in the automotive trade?

Mr. HARVEY. For us it is.

Mr. YATES. It is for you?

Mr. HARVEY. For us; yes, sir.

Mr. YATES. Don't you think you are unique in the field then? I had heard that the automobile business was suffering.

Mr. HARVEY. Well, it has been the history of our business when business gets tough we just get a little bit tougher and we go out after it.

Mr. YATES. I thought that Reynolds went after the hot-metals contract but I am glad that the other companies are going after bnsiness, too.

Incidentally, some of the people on the committee went out to the housing project right out here in Arlington recently. They found that the sash work in the windows was steel. The question was asked as to why it was not aluminum, and the answer that was given was that it would cost an additional $200 to put aluminum in there.

Now I thought aluminum was cheaper than steel for this sash work. Is that correct or am I wrong?

Mr. HARVEY. Aluminum——

Mr. YATES. This is one of the big attractions that your business had, the fact that you could out-compete steel in the housing industry.

Mr. HARVEY. All I can say is that they had a poor salesman for the aluminum industry or they had an uninformed purchasing agent for the contractor.

Mr. YATES. Is the upturn in your business indicative of what is occurring with respect to other fabricators, too?

Mr. HARVEY. From our general feeling in the trade there is a general upswing in the amount and volume of business being done.

That is our opinion.

Mr. YATES. As a fabricator?

Mr. HARVEY. That is right.

Mr. YATES. So that the price reduction will be of benefit then as they move into an upswing in their business?

Mr. HARVEY. If it lasts long enough; yes, sir.

Mr. YATES. Do you not think it will?

Mr. HARVEY. I do not know.

Mr. YATES. What is your opinion?

I asked you before what your opinion of the future was and you said that your business is picking up, and I got the impression from that that you thought, well, "We have turned the corner and are on our way now."

Does this mean that you do not know what is going to happen?

Mr. HARVEY. What I said previously was that prices go with the market and they go up and down depending upon the various economic factors existent at a particular time.

Mr. YATES. Is that true of the primary metals, too?

Mr. HARVEY. It should be.

Mr. YATES. Is it?

Mr. HARVEY. It has not been.

Mr. Chairman, what may affect our business may not necessarily affect someone else's. We might be going up, the other fellow may be going down.

Mr. YATES. The word we have received is that business has not been going up. I had a visit last week or 2 weeks ago in Chicago with a smelter and he said business was not going up. As a matter of fact, he said his business was very bad. Either he is a bad businessman, and he has not been in the past, or else he has not yet found this upswing that you are talking about. Is it different on the west coast than it is in the Middle West?

Mr. HARVEY. No, sir.

Mr. YATES. Have you had occasion to cut back on any of your production facilities?

Mr. HARVEY. We did in the last quarter of 1957, but at the present time we are working in the commercial field.

We are working 6 days a week, 3 shifts right around the clock.

Mr. YATES. Did you lay people off last year in the last quarter?

Mr. HARVEY. Yes, sir, we did.

Mr. YATES. Have you rehired them?

Mr. HARVEY. Some, we have.

Mr. YATES. How many have you laid off?

Mr. HARVEY. I do not recall exactly, but our total complement now is larger than it was in 1957.

We employ more people now than we did in 1957.

Mr. YATES. Is this laying the foundation for your moving into full production with your reduction plant?

Mr. HARVEY. No, sir. It is just regular ordinary business, miscellaneous items.

Mr. YATES. You stated that you propose to furnish small business with metal. Suppose you have a situation like you had in 1955 where there just wasn't enough metal to go around? Would you furnish small business with any metal in addition to that required under the contract?

Mr. HARVEY. We would, sir; to our regular customers.

Mr. YATES. You would?

Mr. HARVEY. We would.

Mr. YATES. What proportion?

Mr. HARVEY. What proportion?

Mr. YATES. Yes.

Mr. HARVEY. I would only go back by a guide to what we have done previously. When the extrusion industry was pinched back by the failure to have a proper amount of raw materials, as to those

customers of ours who were steady customers and regularly bought from us, we sacrificed other business, more profitable business, better volume, new increase into a new industry or into a new customer in favor of our steady customers, and we did supply them with material, and those who depended upon us received a continuity of their supply of raw material.

That is one of the reasons we have the customers today when circumstances are more competitive.

Mr. YATES. Do you propose to export any metal?

Mr. HARVEY. We do not plan to export any metal.

Mr. YATES. Where does Japan get its alumina now, do you know?

Mr. HARVEY. Japan has three companies producing aluminum, one Shawo-Denko Co., the other, Sumitomo Chemical Co., and the other one, Nippon Light Metals Co.

They produce in Japan.

Mr. YATES. For Japanese consumption?

Mr. HARVEY. For Japanese consumption.

Mr. YATES. They do not export it to this country?

Mr. HARVEY. Currently they do not export into this country, although we have had in our plant Japanese pig in the past.

Mr. YATES. At a lower price than American pig?

Mr. HARVEY. No, sir.

Mr. YATES. Do the British export into this country?

Mr. HARVEY. No, sir, they are an importer. There are 2 small plants in Great Britain, both owned by 1 company, British Aluminum. They are a net importer.

Mr. YATES. Under your definition of small business whom you would furnish metal, do Ford and General Motors fall into this category?

Mr. HARVEY. No, sir.

Mr. YATES. Do they fall into a category of nonintegrated producers under your contract with the Government?

Do you consider them as such?

Mr. HARVEY. That is an interesting question, sir, never contemplated, but I do not consider them that.

Mr. YATES. You what?

Mr. HARVEY. I do not consider them that because they are not a primary consumer of metal in the ordinary commercial sense, being fabricators for sale to others.

Mr. Chairman, I think I might clarify one point.

We do have long-term contracts for the supply of alumina, and those contracts run for a period of 5 years.

Mr. YATES. These are the contracts you spoke of being in existence with the Japanese firms?

Mr. HARVEY. Yes, sir.

Mr. YATES. Those are in existence for?

Mr. HARVEY. For a period of 5 years.

Mr. SHEEHAN. I assume or I think I can assume that your contracts with the Japanese firms for alumina are such that between the price you pay in Japan and the freight, you are buying it cheaper than you can buy it in America?

Mr. HARVEY. No, sir, that is not a correct assumption. We bought from Japan because no American producer and no North American producer at the time we offered and tendered contracts would sell us alumina at any price.

Mr. YATES. Anaconda was able to buy alumina as I remember from Reynolds and from Kaiser.

Mr. HARVEY. That is right.

Mr. YATES. Did you attempt to buy any from Reynolds and from Kaiser?

Mr. HARVEY. We did, sir.

Mr. YATES. And you were not able to buy any?

Mr. HARVEY. No, sir.

Mr. YATES. Did they tell you what the reason was?

Mr. HARVEY. They said they did not have the productive capacity to supply our requirements.

Mr. EVINS. Also the reciprocal trade policy, I believe he stated. He believes in free trade to a limited extent, with certain exceptions.

Mr. YATES. Did you attempt to buy alumina from any other large company? Did you attempt to buy from Alcoa?

Mr. HARVEY. Yes, sir.

Mr. YATES. And was the reason for the turndown the same?

Mr. HARVEY. The same answer, sir.

Mr. YATES. What other sources of supply for alumina are there in the country other than the primary producer?

Mr. HARVEY. There are none.

Mr. YATES. Did you attempt to buy alumina in any other foreign country other than Japan?

Mr. HARVEY. Yes, sir.

Mr. YATES. Where did you go?

Mr. HARVEY. We asked the Aluminum Company of Canada if they would sell us alumina. They said "No."

Mr. YATES. Did you attempt to exploit your own sources in Africa, such as Olin Mathieson did, or as other foreign countries——

Mr. HARVEY. Yes, we did, sir, but it would take a long period of time to develop the properties and it would require additional substantial amounts of capital, and our primary objective was to get the primary reduction plant.

Therefore, under our program we are taking it in steps.

Mr. YATES. What happens at the end of 5 years?

Mr. HARVEY. By the end of 5 years we will either have to make another agreement for the supply of alumina, or produce and construct our alumina plant, which we intend to do.

Mr. YATES. Have you made any contacts for the purchase of bauxite?

Mr. HARVEY. Yes, sir.

Mr. YATES. And in the event you cannot make those favorable contracts, you intend to go into your own alumina producing business?

Mr. HARVEY. Yes, sir.

Mr. SHEEHAN. In fairness, I think, Mr. Harvey, we should know when you were trying to buy this alumina from the various companies.

Mr. HARVEY. I think the contracts were entered into in 1955. I think it was 1955, I am not sure.

Mr. SHEEHAN. I merely asked that because I do not want the impression to remain on the record that these companies refused to sell you. That was at a time of a rather drastic shortage, at that time in 1955, is that not right?

Mr. HARVEY. A shortage in the production of primary pig and a greater demand for the pig than the production.

Mr. YATES. Did you have your contract with the Government at the time you went to these companies, or was this preparatory, prior to this?

Mr. HARVEY. No, we had our contract with the Government.

Mr. YATES. You already had your contract with the Government?

Mr. HARVEY. Yes, sir.

Mr. YATES. How could you get a contract with the Government when you had no source of raw material?

Mr. HARVEY. Because the program with the Government envisions a completely integrated facility from bauxite, alumina to reduction, and this was an interim measure to reduce the exposure of the Government and reduce our own exposure to get another source of supply to save the capital investment that would be required for alumina and bauxite at that particular time.

Mr. YATES. I think perhaps I did not make my question clear. Did the Government enter into its contract with you when neither you nor the Government knew that you would be able to obtain bauxite or alumina for the manufacture of alumina?

Mr. HARVEY. No, sir. We had assurances of the receipt or the availability of bauxite. I think at or about the same time, we had certain claims down in one of the South American countries of adequate bauxite resource to take care of our requirements. Secondly, we had developed and invented a process of making alumina from laterite which is a native ore and we had certain claims, certain deposits in the Northwest and we felt sure there were adequate sources if we had to, to build an alumina and bauxite plant.

Mr. YATES. Is this a more expensive process than the current process for making alumina?

Mr. HARVEY. In our opinion, not in the long run, sir.

Mr. YATES. This is the process that Anaconda testified to when it was here.

Mr. HARVEY. No, sir; it is a different process.

Mr. YATES. That was the clay process?

Mr. HARVEY. They had alumina from clay process.

Mr. YATES. And you have a process from laterite ores?

Mr. HARVEY. Yes, sir. One is a clay, it looks like what you expect a clay to be, and the laterite gibbsite.

Mr. YATES. Thank you, Mr. Harvey. If there are no further questions, this committee will stand in recess until 10 o'clock in the morning.

(Whereupon, at 11:45 a. m., the committee adjourned to reconvene at 10 a. m., Wednesday, April 30, 1958.)

ALUMINUM INDUSTRY

WEDNESDAY, APRIL 30, 1958

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE
NO. 3 ON MINERALS AND RAW MATERIALS
OF THE SELECT COMMITTEE TO CONDUCT A STUDY AND
INVESTIGATION OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10:20 a. m., in room 1304 New House Office Building, Hon. Sidney H. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding) and Sheehan.

Also present: Irving Maness, counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The committee will come to order.

Is Mr. Kagan here?

Mr. KAGAN. Yes.

Mr. YATES. Mr. Kagan, will you take the witness stand, please?

Mr. Kagan, we are pleased to have you before the committee. Senator Case has spoken to us with respect to the fact that you are a constituent and we are delighted to welcome you on his behalf as well as our own, and we will abide by the admonition not to take too much advantage of you.

We will be glad to receive your statement now.

TESTIMONY OF GEORGE M. KAGAN, PRESIDENT, KAGAN-DIXON WIRE CORP., RAHWAY, N. J.

Mr. KAGAN. Thank you very much. I will read the statement which I have to the committee.

I thank you for the privilege you have afforded me to appear before you and express my views for your consideration.

I wish to state at the outset, that the continued existence of the small independent producer of aluminum products is fraught with a great deal of peril, as will be clearly demonstrated by a set of facts set forth.

We are a small, independent producer of round, flat, and shaped wires, both in aluminum and brass, with the principal emphasis being in aluminum

We are located in Rahway, N. J., about 20 miles from New York City. Our sales primarily originate in the metropolitan area of New York City. One of the industries we principally serve in that area is the slide-fastener industry, who buy from us aluminum wire designated as alloy 5056.

We purchase aluminum redraw rod and draw and roll it down to smaller sizes to suit our customers' specifications.

We depend upon our source for raw material on Kaiser Aluminum & Chemical Sales, Inc., and the Aluminum Corporation of America, who are the only mills in the United States that have rod mills for the production of 5056 redraw rod in large coils.

Without any advance notice, we were informed by a Kaiser representative on November 22, 1957, that effective immediately Kaiser was reducing its prices on 5056 aluminum wire for the slide-fastener industry, 5 cents a pound.

On November 30, 1957, we were informed by an Alcoa representative that Alcoa was meeting the price reduction initiated by Kaiser, and that its price on 5056 aluminum wire would be 5 cents a pound less than the published price.

However—and this is the important part—on the aluminum redraw rod, which we purchase from Kaiser and Alcoa, the price remained the same as published.

Realizing what a serious blow this was to our small business, I immediately went into repeated conferences with Kaiser and Alcoa officials to allow us a comparable reduction on the raw material we purchased from them.

Any and all pleas for relief on this price reduction has been fruitless.

In other words, while our material cost from Kaiser and Alcoa remained the same, we were compelled, in order to meet their competition, to reduce our aluminum wire prices a minimum of 5 cents per pound.

How seriously this reduction affected us, is illustrated as follows: this price cut represented a reduction of slightly under 8 percent of the published aluminum wire prices.

Our net operating profit, before taxes, in 1956 was 2.8 percent and in 1957, was 1.8 percent. The result is obvious.

This move on the part of Kaiser and Alcoa, in reducing the aluminum-wire price, without, at the same time reducing the redraw rod to us, had had a crippling effect on our business. Since our inception in the wire business, we have always been able to operate at a modest profit. However, aided and abetted by this discriminating competition, for the first time, we operated in the red for the fourth quarter of 1957.

For the first quarter of 1958, while our unit sales are substantially the same as the first quarter of 1957, we are struggling to operate our business at a break-even point.

Our position is that these practices on the part of our raw-material suppliers are discriminating. We ask for nothing more than to be afforded the opportunity to compete on an equal basis. We are not asking for any favors.

However, the long run effect of this price discrimination, may well be that it may force us out of the aluminum-wire business. It is not beyond the realm of speculation that the underlying intent of the integrated aluminum producers is to either force the small independent fabricators out of business, or to limit their growth.

It has been the talk, in metal circles, that the integrated aluminum producers, with a great deal of excess fabricating capacity, are determined to fill up their own channels of production on any basis, regardless of the consequences on the smaller independent producers. This recent arbitrary price slash, certainly not based on reduced costs, can be followed by additional arbitrary price cuts to assure the certainty

of driving smaller independent wire producers out of the aluminum business.

Against this situation, we have no protection, and this is fundamentally the reason we have called this troublesome matter to your committee's attention.

Mr. YATES. Thank you, Mr. Kagan, for your statement. Whom did you talk to at Kaiser and at Alcoa, in an effort to obtain a reduction?

Mr. KAGAN. I talked to Mr. Ronnie Mallard at the Pittsburgh Office, who is the assistant to Dave Miller. He is in charge of all rod bar and wire for the entire Alcoa division. I talked to Mr. O'Halloran, who is the general sales manager of Kaiser, and Jack Watson, who, I believe, is in charge of all sales for Kaiser Aluminum.

Mr. YATES. What did they tell you?

Mr. KAGAN. Pardon, sir?

Mr. YATES. What did they tell you?

Mr. KAGAN. Very frankly, Kaiser's position was that they did not feel that they were getting their fair share of the business in the metropolitan area of New York City, and this was a medium of attempting to get their fair share of the business.

Mr. YATES. Was this what the Kaiser people told you?

Mr. KAGAN. Yes.

Mr. YATES. The persons whom you just named were the ones who told you that?

Mr. KAGAN. That is right; that is right.

Mr. YATES. Mr. Sheehan inquires whether this cut as only for the metropolitan market of New York or whether this cut was for the entire country.

Mr. KAGAN. It applied to the alloy 5056 wire.

Mr. YATES. Nationwide?

Mr. KAGAN. And it applied nationwide. Mr. Mallard's—of course, I say Mr. Mallard and Mr. O'Halloran. I had many small conferences with the local offices before I got to Chicago and Pittsburgh. Mr. Mallard, who I saw in Pittsburgh December 27, I believe, he felt that the cut had not been initiated by them, but they felt they had to go along in order not to have Kaiser gain any competitive advantage. In sum and substance, that was the total reaction.

Mr. Mallard felt I was entitled to some relief. He couldn't see how he could do it. He would think about it. And I think at the present time it still remains in the thinking stage.

Mr. YATES. And how long ago was your conversation with him?

Mr. KAGAN. December of 1957.

Mr. YATES. Do you know how many businesses there are in your area that do work such as you do?

Mr. KAGAN. Three that I know of, three in the area.

Mr. YATES. Is this in the metropolitan area of New York?

Mr. KAGAN. That is right.

Mr. YATES. Do you happen to know how many businesses there are like this in the country?

Mr. KAGAN. I'm sorry to say I do not.

Mr. YATES. Do you sell your product only in the metropolitan area of New York?

Mr. KAGAN. I would say 90 percent of my sales originate in the metropolitan area of New York City, and we have occasional sales outside of the area.

Mr. YATES. Have you spoken to your competitors in this field? By "your competitors" I mean your small competitors who are like your company?

Mr. KAGAN. That is right, I have.

Mr. YATES. You have spoken to them?

Mr. KAGAN. Yes.

Mr. YATES. Can you tell the committee their names?

Mr. KAGAN. I have spoken to Nesor Alloys in Newark, N. J. I have spoken to—I know it as well as my right hand—Durable Wire Products, in Bradford, Conn.

Mr. YATES. Are these businesses about the same size as yours?

Mr. KAGAN. I would say so.

Mr. YATES. Perhaps we had better get an idea as to how big your business is. How much are you capitalized for and how much business do you do?

Mr. KAGAN. I would say our average sales now are approximately a million and a half per year. It is a small business.

Mr. YATES. And how long have you been in business?

Mr. KAGAN. I have been in business since 1942 but primarily I have been in the wire business about 1946 or 1947.

Mr. YATES. You started in business in 1942?

Mr. KAGAN. Yes.

Mr. YATES. In this type of business?

Mr. KAGAN. No, we were primarily in the machine shop work in 1942 and 1943, but we veered into the wire business in 1946–57.

Mr. YATES. You have been in this type of wire business since 1946?

Mr. KAGAN. 1947 primarily, I'd say.

Mr. YATES. Is this true of the other businesses which you mentioned?

Mr. KAGAN. I think Nesor Alloys have been in business a little bit longer than we have, and the other ones, Durable, I'd say about the same as I.

Mr. YATES. And to whom did you speak at each of these companies?

Mr. KAGAN. I spoke to Mr. Smith at Durable Wire in Bradford, Conn.

Mr. YATES. Was he up against the same difficulty——

Mr. KAGAN. Yes.

Mr. YATES. That you are?

Mr. KAGAN. Identical.

Mr. YATES. What did he tell you?

Mr. KAGAN. Well, we both bemoaned our fate, and I think they have attempted, he in his own way has attempted to secure some relief and I do not think he has received any.

Mr. YATES. Is he faced with the same thing, the same problem you are?

Mr. KAGAN. Identical.

Mr. YATES. And what about the other company?

Mr. KAGAN. They also are faced with the same situation.

Mr. YATES. Who did you talk to there?

Mr. KAGAN. Let me see, there are two individuals there. It is a peculiar thing. I live with these people all the time, I appear before you and I cannot think of their names.

Mr. YATES. I'm getting to that age myself.

Mr. KAGAN. As a matter of fact, I play golf with one of them. I will think of it, Herbert something. They are in Newark, N. J., which is 10 miles from New York.

Mr. YATES. You can furnish it for the record. And what did he say? He said that he too was faced with the same difficulty?

Mr. KAGAN. The same situation, that is right.

Mr. YATES. What happens to your business then, if this continues? You say the result is obvious. How much longer can you go on?

Mr. KAGAN. As I said, for the first quarter of 1958, we are at a break-even point. The only way we think we can overcome the situation is by increasing our volume.

Perhaps the volume itself can overcome this disability.

Mr. YATES. Is there any other place where you can get your raw material?

Mr. KAGAN. No, sir.

Mr. YATES. These are the only two sources of supply?

Mr. KAGAN. Correct.

Mr. YATES. How about Alcan? Does Alcan manufacture this raw material?

Mr. KAGAN. They do.

Mr. YATES. Did you try to get it from that company?

Mr. KAGAN. I have tried in the past. They won't supply it in the United States.

Mr. YATES. They do not supply it to the United States?

Mr. KAGAN. They do not, sir.

Mr. YATES. Who did you talk to there?

Mr. KAGAN. Well, I say I have a letter on record in 1957 requesting for quotations on redraw rod, and they wrote back that—I forget the exact phraseology. I think Mr. Maness asked me the same question and I am sorry I didn't bring that correspondence with me. I am trying to refresh my recollection. I think the import of the letter was that they didn't have this rod for sale or didn't fabricate it.

Of course, I have sort of a feeling about that, Mr. Yates. I know this identical alloy is being produced in Canada. It is being used by wire producers in Canada. I know they sell it in Latin America, I think south of the United States, either directly through Alcan or through British Aluminum, but I can't buy it directly from Alcan into the United States.

Mr. YATES. At what price is it sold in Canada, do you know?

Mr. KAGAN. I wouldn't know, but I would think it would be in Canada probably about 2 cents a pound less than here, because I know of some people in the strip rerolling or people that use strip bring in aluminum strip from Canada at about 2 cents a pound less.

Mr. YATES. Why can't you buy it from Canada, then, and have it shipped here?

Mr. KAGAN. Why can't I? I have inquired. I have tried to buy it. I can't buy it.

Mr. YATES. Is there no distributor or is there there—in other words, is there anybody from whom you can buy this in Canada except Alcan?

Mr. KAGAN. I would say so. It is strictly a mill item.

Mr. YATES. It is strictly a mill item?

Mr. KAGAN. That is right.

Mr. YATES. Did you make any inquiries of Reynolds?

Mr. KAGAN. I have made inquiry of Reynolds. They do not have a rod mill. They make redraw rod in a different fashion, and we have sampled their rod, but it is made in too small a coil. It is not adequate for our wire redrawing purposes.

These coils that come in are approximately 250 pounds per coil weight. It is a large diameter, probably about the width of my hands, and requires a certain type of rod mill equipment to enable it to be drawn and rolled continuously and wound continuously and Reynolds does not have that type of equipment.

Mr. YATES. What is going to happen to your business, then? Is there another field of operations that you can go into?

Can you adapt your machinery to any other thing?

Mr. KAGAN. To a large extent. We also, as I told you in my statement, we draw and roll brass wire products, and I'd say today about 30 to 35 percent is in the brass business, and we are trying at the present time to emphasize on that because I think we get a squarer shake from the copper industry than we do from the aluminum industry.

Mr. YATES. I didn't hear that.

Mr. KAGAN. We get a squarer shake from the copper industry than we do from the aluminum industry.

Mr. YATES. In what respect?

Mr. KAGAN. In this respect. For instance, in the copper market, there has been a declining market since November of 1956. When price cuts are initiated, they emanate right from the top and go right down to the bottom.

In other words, the same price reduction——

Mr. YATES. What do you mean by top to bottom? You mean in all products?

Mr. KAGAN. Right from the copper ingot and billet to the finished product. In other words, when the brass mill people or the copper mill people have a price reduction, they reduce it to all items so that my competitive level remains the same, and it has been true since 1956 that I remain competitive, in that my material costs the same as the people I'm competing against.

Mr. YATES. Mr. Sheehan.

Mr. SHEEHAN. Mr. Kagan, for my own edification, on this 5056 aluminum wire you are speaking about, is this made for the specific purpose of your industry or does it have general application?

Mr. KAGAN. It has some general application. It is used for rivet wire in the screw and rivet industry.

Mr. SHEEHAN. Would you be able to give an educated guess as to how much your particular industry consumes or uses of this 5056 wire as compared with all the rest of the industries?

Mr. KAGAN. Yes. I would say—I am guessing at it, and based upon conversations I have had with other people—I would say that the slide fastener industry uses 80 to 85 percent of the total of 5056 alloy that is produced in the United States.

Mr. SHEEHAN. On the basis of your guess, this is pretty much a specially designed wire for use in your industry.

Mr. KAGAN. I think some years ago, it was primarily developed for the slide fastener industry.

Mr. SHEEHAN. If your educated guess is right, maybe I would conclude and perhaps I shouldn't conclude here, that your thought

is that the copper industry treatment should pretty much apply here, because if the aluminum companies can effect a savings in their own end product in which they are competing with you, certainly maybe they should go all the way down the line.

That is the way it looks at least on the basis of your testimony here.

I think Mr. Yates has asked you most of the questions that I had in mind except that I would like to pursue one other thought for a couple of moments. You state that your sales are about a million and a half dollars per year.

Mr. KAGAN. That is right.

Mr. SHEEHAN. How many years has it taken you to get to that stage?

Mr. KAGAN. Ten years.

Mr. SHEEHAN. If you were to materially increase your sales in order to make up for the additional cost, about how much in additional sales would you estimate you would have to have?

Mr. KAGAN. About 50 percent more.

Mr. SHEEHAN. So you would have a pretty rough job putting on an additional $750,000 worth of sales, is that right?

Mr. KAGAN. That is right.

Mr. SHEEHAN. Which leads me also to this particular question. We would have to bear a relationship, if you got a 5 cent per pound——

Mr. KAGAN. Differential.

Mr. SHEEHAN. Differential, but what part of this 5 cent per pound does that bear to the finished cost of the wire? I mean it may be infinitesimal or it may be a good part of it.

Mr. KAGAN. That 5 cents a pound, Mr. Sheehan, represents substantially the profit I had prior to this reduction per pound. In other words, this makes a difference between operating on a break-even point or operating at a profit.

Mr. SHEEHAN. That again brings me to another point. We have heard that in another industry, and I assume it would also apply to your industry, that certain people of the country come out with the idea that in order to stimulate the economy, manufacturers should cut prices a flat 10 percent.

A chap like yourself in small business who is operating on a basis of a net profit in 1957 of 1.8, or in 1956 at 2.8 percent, if you were to cut your selling prices 10 percent, you would have a tremendous job getting enough volume to operate profitably, would you or would you not?

Mr. KAGAN. I couldn't do it. I would like to have you bear in mind, Mr. Sheehan, that this price reduction by the integrated wire producers was not based upon reduced costs or increased efficiency. It was an arbitrary cut based upon a specific purpose, to attempt to get more business for themselves at the cost of other people.

I mean, I believe in reduction of prices based upon efficiency, lower costs, more modern machinery, but sheer price cuts designed to merely stifle a competitor, that is not good for anybody.

Mr. SHEEHAN. Of course, I must observe to do justice that you are giving a viewpoint here and Alcoa and Kaiser might have a different picture of it.

Mr. KAGAN. Of course.

Mr. SHEEHAN. You don't want the record to stay that way until after they have answered. On the face of things, I would say you have presented a very good case.

Mr. KAGAN. I have to some extent come here with a great deal of trepidation.

Mr. YATES. I would like to ask you this question which occurred to me after Mr. Sheehan asked his.

You stated it will be impossible for you to cut your prices. Suppose the cost of your raw material were cut?

Mr. KAGAN. Of course.

Mr. YATES. So that it were the same as it was to the big companies. Would you be in a position to cut your prices then to meet their competition?

Mr. KAGAN. Of course. As a matter of fact, I have cut my prices to meet their competition. That is where my difficulty lies.

They have an advantage in the raw material cost as far as I am concerned. For instance, Mr. Yates, on April the first, when Alcoa and Kaiser and the other integrated producers met the 2-cent reduction of Alcan of Canada, that was an industrywide reduction, they cut the 2 cents on practically all items.

All prices were lowered by that 2 cents a pound. I mean these reductions are immediately carried on to the consumer.

Mr. YATES. Let me ask you whether you have lost any customers as a result of this?

Mr. KAGAN. I have.

Mr. YATES. What has been your experience in that respect?

Mr. KAGAN. My experience in one particular case, one of the integrated wire producers are even selling lower than 5 cents a pound to get certain business.

Mr. YATES. Which one is this?

Mr. KAGAN. Reynolds Aluminum.

Mr. YATES. I lost this. You said in one case one of your—what was the statement you made?

Mr. KAGAN. The statement that I made was that I have lost a customer for aluminum wire.

Mr. YATES. For aluminum wire?

Mr. KAGAN. Yes. That particular customer was able to buy this particular alloy at a price lower than the 5-cent cut made by the other integrated producers.

Mr. YATES. I thought Reynolds wasn't in this business. Is this a different type of business?

Mr. KAGAN. No. They make the wire, but they don't make the rod for redraw purposes.

Mr. YATES. I see, so that you compete against them in another way?

Mr. KAGAN. That is right. I actively compete against all of them.

Mr. YATES. Counsel suggests that you have samples of the redraw rod and the wire with you.

Mr. KAGAN. That is right.

Mr. YATES. May the committee see them? Will you show them to the committee so that we uneducated people can get to know more about this business?

Mr. KAGAN. Yes, I know that can be very difficult.

I exhibit a sample of the raw material that I buy from the integrated producers. It comes in large coils, approximately 7 or 8 feet in diameter, and this material is entered into wiredrawing equipment

and reduced to finer size to meet customer specifications, and I show you a sample of the wire in its final stage.

Mr. YATES. You draw even finer than this, I presume?

Mr. KAGAN. Yes. This is a typical sample of the wire used by the slide-fastener industry.

Mr. YATES. And they make the zippers out of this?

Mr. KAGAN. That is right.

Mr. YATES. Thank you very much. Now what was the nature of the wire that you were competing with against Reynolds, the wire product that Reynolds makes, the thiner wire? It doesn't make the rod; is that right?

Mr. KAGAN. I'd like to clarify. Reynolds makes aluminum wire in all categories for sale.

Mr. YATES. It does not make the rod?

Mr. KAGAN. It does not make this type of redraw rod for redrawers to buy, but it produces rod.

Mr. YATES. For its own uses?

Mr. KAGAN. For its own purposes to redraw into fine wire. I am talking about 5056. I think they do make EC rod for resale to independent fabricators.

Mr. YATES. And the instance which you gave the committee, of where Reynolds has undersold you by 5 cents was like the wire in that roll that you just exhibited?

Mr. KAGAN. That is right, very recently.

Mr. YATES. So you lost that customer?

Mr. KAGAN. That is right. I was offered the business at the same price. I couldn't afford to take it.

Mr. YATES. When was this?

Mr. KAGAN. Last month.

Mr. YATES. You haven't gone back this month to see whether the price is the same?

Mr. KAGAN. He called me up, as a matter of fact, only 2 weeks ago and I gave him my quotation. He said, "You are still too high, Mr. Kagan."

I said, "I'm sorry, I can't meet that other figure."

It is strictly uneconomic to go beyond this level. And these are unpublished prices, sir.

Mr. YATES. These are unpublished prices?

Mr. KAGAN. That is right, unpublished prices.

Mr. YATES. Does Reynolds have a published price for the wire?

Mr. KAGAN. Identical to Alcoa and Kaiser, and their out is that at all times they meet competitive situations.

Of course, that is as broad a declaration as you can possibly make.

Mr. YATES. Did you furnish the name of your customer for the record; or would you rather not?

Mr. KAGAN. I was told this in confidence, Mr. Yates.

Mr. YATES. Very well.

Mr. KAGAN. If the committee wishes me in privacy to disclose the name, I will.

Mr. YATES. That is fair enough. Now, you said you came here with some apprehension. Did you say apprehension or trepidation?

Mr. KAGAN. It means the same thing.

Mr. YATES. Yes. Why do you have this attitude? Are you afraid of reprisals?

Mr. KAGAN. That is right.

Mr. YATES. What can happen to you?

Mr. KAGAN. I attempt to keep as good a relationship as I can with my supplier.

Mr. YATES. I understand that, but it is very difficult for you to maintain a good relationship with your suppliers in view of what is happening now, isn't it?

Mr. KAGAN. What can happen? Of course, their representations are that they will sell to anyone that will buy from them. I need X pounds of wire per month. I require specific deliveries. I don't say that they will, but I think many things, small things, can be done to affect deliveries to me.

They would probably take my orders. All orders are taken subject to conditions beyond their control. Who knows what can hold up deliveries?

Mr. YATES. The impression I get, Mr. Kagan, is that you are just a little straw caught in some giant whirlwinds in an economy that is depressed at the moment and they are really engaged in basic competition.

Mr. KAGAN. Mr. Yates, I am not only here to speak for myself. There are many, many like me who would like to speak out. As a matter of fact, I was cautioned not to do this.

Mr. YATES. By whom?

Mr. KAGAN. Associated business people. I was counseled not to do it, but I took conscience with myself, and I feel that someone in some small way has to demonstrate this.

Mr. YATES. And very commendably.

Mr. KAGAN. To the country at large.

Mr. YATES. I think that is very commendable, too, otherwise we would never get the information that we need to become cognizant of what is going on in American business.

Mr. KAGAN. Yes.

Mr. YATES. I have here a wire which I received on April 4 signed by Richards of South Wire Co. of Carrollton, Ga., addressed to me as chairman of Subcommittee No. 3 of the House Small Business Committee, and it says this:

> Yesterday, Kaiser revised EC redraw rod price from 34.6 cents to $0.28.

Mr. KAGAN. That is right.

Mr. YATES (reading):

> This move completely eliminates nonintegrated fabricators from participation in market. The following cable has been sent to Kaiser:
>
> "Kaiser revision of rod pricing schedule in effect eliminates South Wire and other nonintegrated producers from the market. Request you revise upward to original level, thereby allowing realistic costs and profit differential between pig and rod.
>
> "It is our opinion your new rod schedule will slow down increased usage of aluminum by decreasing number of people with incentive to develop new markets."

And then the rest of the telegram to me:

> Any assistance from your office to prevent nonintegrated producers from being eliminated will be greatly appreciated.

This telegram was received during the congressional recess. When I returned on April 16, I wrote this letter to Mr. Henry J. Kaiser, president of the Kaiser Aluminum Chemical Co., 1924 Broadway,

Oakland 12, Calif., with a carbon copy going to Mr. Chad Calhoun, who is his representative:

Subcommittee No. 3, of which I am chairman, of the House Small Business Committee, is in receipt of the following telegram from Mr. Richards of the South Wire Co. of Carrollton, Ga.—

and I repeated the telegram:

This subcommittee is concerned with complaints of price squeezes against small business. We would like to know, therefore, whether the statements made by the South Wire Co. are substantially correct.

We haven't received a reply from Kaiser to date.

(Reply was subsequently received and appears on p. 319.)

Mr. KAGAN. Mr. Yates, I know about that situation, and I think that that situation that Mr. Richards speaks of is really a terrible situation.

Mr. YATES. In what respect?

Mr. KAGAN. Mr. Richards, who is president of the South Wire Co., General Cable, who is a similar competitor, they buy pig and ingot from the producers to produce EC rod which goes into electrical industry.

This move will definitely put South Wire out of business and practically eliminate General Cable as a competitor in that particular phase of the business.

Mr. YATES. How big a company is it? Do you have any idea how big Southwest Wire is?

Mr. KAGAN. South Wire does approximately $15 million to $20 million a year, and their primary production is in EC rod. They buy the pig and the ingot to produce the EC rod.

Now bear in mind, pig now is 24 cents. Kaiser's reduction down to 28 cents, I believe it is—I have the figure— only allows a spread of 4 cents a pound to produce the EC rod from the pig and ingot. It is a physical and economic impossibility. We are close to General Cable and they are at their wits' end over the situation because they have a tremendous plant in St. Louis doing the identical thing, and now they are practically in a position where they may have to shut down that plant because they say they can buy their rod cheaper from an integrated producer rather than produce their own rod, and that is closing down a plant of significant value.

Mr. YATES. How big a company is General Cable?

Mr. KAGAN. General Cable is one of the larger cable producers in the United States. I would say their sales may run $40 million, $50 million, or $75 million a year.

Mr. YATES. Is it a subsidiary of another company?

Mr. KAGAN. I think that one of the copper people have a substantial interest in General Cable.

Mr. YATES. I think it is a subsidiary of Anaconda; is it not? I am not sure.

Mr. KAGAN. I am not sure. One of the copper companies have a substantial interest in General Cable, and that item is identical with what has happened to me; they have done in a bigger way to the EC redraw people. It will affect Nichols Wire, in Davenport, identically the same way.

Mr. YATES. How many wire companies are there who are going to be affected by this?

Mr. KAGAN. By this EC situation?

Mr. YATES. Yes.

Mr. KAGAN. Offhand, I know there is South Wire, there is General Cable, Nichols Wire in Davenport, Iowa, United Wire in Providence, R. I., and this cut certainly is not based upon anything else but ruthless competition. I think the integrated producer—and I speak of a field I don't know too much about except from general knowledge of the industry——

Mr. YATES. I think it would be a good idea for this committee to contact those companies and see what the situation is. We are still waiting for a reply from South Water. I think we will perhaps look into the other companies who might be affected by this type of practice and see just what has occurred in that respect. It is interesting to me to note that with respect to your case the reduction in the sale of the product you sell by Kaiser took place before the price dropped in primary metal; didn't it?

Mr. KAGAN. Oh, yes. This is November of 1957.

Mr. YATES. Now has there been a corresponding reduction in your raw material, which followed the reduction in primary metal?

Do you understand what I am talking about?

Mr. KAGAN. I think I understand your question.

With respect to the November cut, there was no corresponding raw-material reduction to me. With respect to the April 1 general industrywide cut, there was a basic 2-cents-a-pound reduction right down the line from the raw material down to the finished product, but that 5-cent differential is still being maintained.

Mr. YATES. I see. So the competitive price to yourself was reduced comparably by 5 cents; is that right? It went down an additional 2 cents in accordance with the reduction in the primary metal?

Mr. KAGAN. That is right.

Mr. YATES. We are very grateful, Mr. Kagan, for your statement. We are trying to obtain as much information as we can on the price squeeze. We recognize that it is much more difficult for you to compete today in a time of a recessed economy than it was when we first began our hearings in 1955.

At that time your problem was getting the metal, more than anything else; was it not?

Mr. KAGAN. That is right.

Mr. YATES. And today you get the metal but at a price which will not permit you to stay in business, so that on the one hand when the metal is in short supply, you as a small-business man have extreme difficulty in obtaining an adequate supply to manufacture your product.

Today, when metal is in abundant supply, you have difficulty getting it at a price which will enable you to compete.

Mr. KAGAN. That is right.

Mr. YATES. The lot of the small-business man is a very difficult one.

Mr. KAGAN. I am not appearing for sympathy in any way.

Mr. YATES. Do not misunderstand my statement. I am not sympathizing with you in that respect. I am merely stating an existing fact.

Mr. KAGAN. Yes.

I think I am perfectly willing to meet them in the open market and compete with them actively for the business at their published prices, because I buy at the published price and I expect that they will

conform in selling their finished product at the published price and, along those lines, I'll take my chances and compete with them because I can get my fair share of the business under those circumstances.

Mr. YATES. But this is the published price, though, this new price of Kaiser and Alcoa Aluminum?

Mr. KAGAN. No. This 5-cent cut is still an unpublished price, sir. I would like to make that very clear.

Mr. YATES. It is an unpublished price?

Mr. KAGAN. That is right.

Mr. YATES. Do you have a copy of Alcoa's price schedule?

Mr. KAGAN. As of April 1, 1958. Is that the one?

Mr. YATES. And what does that indicate the price of the raw material to be?

Mr. KAGAN. The price of the raw material on page 6 under redraw rod 5056F, is 439 cents per pound in 30,000-pound quantity.

Mr. YATES. And what are they selling it at?

Mr. KAGAN. A sample of the finished wire that I just exhibited to the committee appears, the price schedule appears on page 3 under the column "5056," and the diameters of 0.077 to 0.097, the price as it appears in the schedule is 616. That is being sold at 5 cents less than that by Kaiser and Alcoa, and as I told you, in other industries is being sold lower than that by another integrated producer.

Mr. YATES. How do you know this specifically?

Mr. KAGAN. How do I know it specifically?

Mr. YATES. Yes.

Mr. KAGAN. Well, I sell to the very same people that these people sell it to.

Mr. YATES. They told you what they could buy this for from Alcoa and from Kaiser?

Mr. KAGAN. No.

Originally I was informed by Kaiser. I said in my statement they were making the cut.

Mr. YATES. Yes?

Mr. KAGAN. Their sales representative——

Mr. YATES. You mean Kaiser actually told you they were going to sell at 5 cents lower than the price that appears in the printed schedule?

Mr. KAGAN. Correct.

Mr. YATES. I see.

Mr. KAGAN. They told me—their sales representative.

Mr. YATES. And did Alcoa tell you that it was going to do the same in order to compete with Kaiser?

Mr. KAGAN. Correct.

Mr. YATES. Now did you see this in effect in the customers' hands anywhere, your customers?

Mr. KAGAN. In December I immediately lost all of my round wire sales.

Mr. YATES. All of it?

Mr. KAGAN. Yes, and only when I started meeting that price did I get some of my business back.

I mean you get friendly with the purchasing agents. They tell you what the story is, that the Alcoa and Kaiser people were around and were offering this reduction. They are friends of mine but they are still going to buy it at the lower price. In December I would

not meet the price. I felt I was definitely unable to do so. But I was forced to do it in January.

Mr. YATES. In how many instances did this occur? How many customers are you talking about?

Mr. KAGAN. I'd say about 25 to 30 customers.

Mr. YATES. And in each of those cases you found that you could not sell to your old customers because of the reduction in price?

Mr. KAGAN. That is right. There is no question about that. I think it is an admitted situation, that they initiated this cut. I mean there was no denial of it. I cannot get a letter from them telling me these are the effective prices, but in conversations with any and all of these officials, it is an admitted fact.

Mr. YATES. I think we would like to get the names.

The committee will talk to you in private and try to get additional information about your customers.

Mr. KAGAN. Fine.

Mr. YATES. We are grateful for your cooperation.

Mr. KAGAN. Thank you, Mr. Yates.

Mr. YATES. You have presented a very good statement to this committee and given us the source of much concern in addition to yourself. We will try to reflect your concern and try to be helpful.

Thank you very much.

Mr. KAGAN. Thank you.

Mr. YATES. Mr. Smith, please.

Mr. Smith, we welcome you to the committee and we will be pleased to receive your statement.

Mr. SMITH. May I read it?

Mr. YATES. You certainly may.

TESTIMONY OF A. A. SMITH, PRESIDENT, ADAM METAL SUPPLY, INC.

Mr. SMITH. I am the president of Adam Metal Supply, Inc., a small aluminum distributing warehouse, located at 4–63 48th Avenue, Long Island City 1, N. Y.

We buy aluminum circles, sheet, rod, bar, tubing, pipe, and extrusions from a domestic mill and distribute it in small quantities to about 1,500 accounts located mainly in the metropolitan area of New York City. These consist mainly of small manufacturers, machine shops, and metal working shops of various kinds, such as stampers, spinners, and tinsmiths.

There are about a dozen companies like mine in this area, some of which buy from Kaiser, or Reynolds, or like me, from Alcoa. While I am here speaking for myself and my company, I know that my competitors are suffering the same as we are, and we have frequently discussed this problem.

The aluminum industry is an old one in the United States, but the aluminum warehousing industry grew up in World War II and the Korean incident, because of the need of the aircraft, airframe, electronics, and missiles manufacturers and Government agencies for a steady, dependable source of supply for aluminum in small lots.

Large companies which customarily buy directly from the mill have grown to depend on warehouses for smaller needs and for immediate deliveries.

The aluminum warehouses now serve as a source of supply for countless small businesses that could not stay in business without the warehouse there to serve them.

Our warehousing industry serves an extremely necessary function. It is much cheaper to buy from a warehouse in smaller quantities and you do not have to wait a long time for delivery from the mill.

In World War II the War Production Board found it necessary to grant us priorities so that we could maintain our stocks and serve the defense industries.

At present we serve so many varied, necessary industries that we can properly be described as indispensable. It is not unusual for a company in Tennessee making an atomic energy installation to require some I-beams in a hurry, find them in our stock, and for us to ship them the same day as ordered.

It is not unusual for some Government modification center to telephone us to ship some aluminum sheets immediately to make some needed repairs. It is just routine for a manufacturer of storm windows or jalousies to call up for some angle or tubing he needs to continue production.

However, aluminum was not always in ample supply. During periods of shortage a certain amount of dependence was placed on foreign sources. This metal started to come into the United States at fair prices, but soon began to command premium prices. Those who engaged in the import of aluminum did not neglect the opportunity to make a killing by charging as high a price as they could get.

At present aluminum is not in short supply. There is enough to go around. Some people say there is too much of it but I believe the demand will soon catch up.

Nevertheless, at this time, importers are still bringing metal in from abroad,even though there is a plentiful domestic supply in the United States.

And presently they are selling the metal they bring in for as much as 10 cents per pound less than I can sell it for, as you can see by the attached exhibits.

The sale of this foreign, imported aluminum is seriously affecting my business and that of my competitors. Before the Korean incident we used to sell about 150,000 pounds of aluminum circles per month. Now because of imported metal, we are happy if we can sell 20,000 pounds. We used to sell about 70,000 pounds of aluminum screw machine rod every month. Now we cannot sell any because the importers are selling it here at less than I can buy it from my domestic mills.

Our warehouse industry is intensely competitive, has grown steadily, and has developed ever more vigorous competition. That's the way it should be. I am not complaining about competition. I am complaining about unfair competition. Foreign aluminum is unfair competition. It is unfair because the importers are not operating under the same conditions we are. No; not at all. The foreign countries which have aluminum to sell dictate the amount, the price, and the terms of sale.

As Nathaneal Davis, of Aluminum, Ltd., said, in the American Metal Market of April 25:

> We cannot alone, however, expect to compete against the resources of a state.

There is no assurance that they, the exporters or importers, will continue to supply aluminum in the United States when we need it or whether the price will be low or high. The foreign trade policy of the exporting country and conditions there control their exporters. The price in the exporting countries is not a factor because it is often higher there than the price they get here. They sell aluminum here to get dollars, not to help our industry.

The deluge of foreign aluminum is hurting my business, and may result in the destruction of other small businesses such as mine.

So that when the demand for aluminum for defense comes along we may not be there to serve. The small manufacturer may well have to abandon the use of aluminum because it will not be available.

It has been reported that imports of aluminum amount to only about 3 percent of domestic shipments. I have no way to prove or disprove that figure. But I do know my business which I have been in since 1931, and which I have built up from a one-man business to a point where I now employ about 75 people. We grew up through the depression, in the face of handicaps, in spite of the shortages and difficulties that beset us. But we cannot engage in economic warfare with foreign countries, and do not believe we can survive without some help. We do not make our own metal and cannot control the price.

The policy of the United States may be for reciprocal trade. I am not in a position to make any large decisions about what the policy of my Government should be. I do know that the sale of foreign aluminum by importers and brokers is hurting my business. I suppose I can just stand by and let my business dwindle and finally die, or else I too can begin to sell foreign aluminum. But, if I handle imported metal then I cannot be the dependable, steady source of supply that I have come to be, at a reasonable price, in all kinds of emergencies, for all kinds of businesses, because my source of supply will no longer be in the United States, controlled by the governmental policy of the United States, but abroad, and subject to foreign governmental control, and subject to all the hazards and uncertainties of a foreign source, at a price dictated by opportunism and unpredictable, to the detriment of domestic industry, both small and large.

I sincerely appreciate the opportunity to present my story here to you. My hope is that with the facts I have related you will understand better the impact of foreign aluminum and help us meet the situation in some way.

I would not want to be the victim of a policy that might destroy me and my competitors because the Government is not aware of the vital nature of my function. I believe my business is essential to the well-being and prosperity, if not the existence of the United States of America.

Just what the action to help us should be I cannot say. But I am a small business, the same as my competitors and most of my customers. I am sure you want to help us, and will try to do something to enable us to continue to exist. Thank you.

Mr. YATES. Thank you, Mr. Smith, for your statement. The statistics that the committee has received from the Department of Commerce indicate that imports for the last several years have averaged about the same. In 1955 the imports of plates, sheets, bars, and so forth, according to this report from the Bureau of Mines,

Mineral Industrial Survey, MMS No. 2714, was 20,972 short tons in 1955, 22,582 short tons in 1956 and for 11 months of 1957, which is the latest report that we can get, it was 17,792 tons, and if you take an average monthly figure and add it to that for the remainder of the year, you come out to roughly about 20,000 tons, which is about the same.

Did you experience the same difficulties in 1955, 1956, and 1957 as you are experiencing now?

Mr. SMITH. We get as a service the report, this blue copy that is turned out by the Office of Business Economics, the Survey of Current Business, and the latest issue, if you will look at the figure, the comparison which affects me, which is not ingot but wrought aluminum products, the proportion is now up to 4 percent. We did not appreciate the impact of foreign aluminum when aluminum was in short supply here. In fact, we needed some of that aluminum. But since they have gone through these rounds of expansion, right now there is plenty of aluminum here.

Mr. YATES. You understand the figures I was reading was not of primary metal. It was semifab and fab, sheets, bars, and rods.

Mr. SMITH. That is one of our troubles, that we do not have available any real figures that we know what is going on. But if so, if you figure that it was 3 or 4 percent, the fact that that imported aluminum comes in right in the New York market, 90 percent of it, and they may not feel it through the rest of the country yet, but as soon as that St. Lawrence seaway is open and the freight rates change a little bit, that imported aluminum will be affecting the entire country, at least my business.

Mr. YATES. How has your business suffered?

What were your profits in 1955, 1956, 1957, and what is happening now?

Mr. SMITH. We are not losing any money. Our profits are about the same. They are a little less, they are running a little bit less in 1957 than 1956, because the whole aluminum business has expanded so tremendously that in spite of the fact that we have lost some markets, we have been able to make enough money to get along.

Mr. YATES. You are doing much better than the big companies are doing, are you not?

Mr. SMITH. That is right, we are, because we have not got so much to lose.

We have got a smaller business.

Mr. YATES. I do not understand how you have been hurt by the importation then. You have not been hurt yet, then, have you?

Mr. SMITH. Well, we have. We have lost our circle business, we have lost our common alloy sheet business. We have lost our screw machine rod business.

Mr. YATES. To whom have you lost it?

Mr. SMITH. To the importers.

Mr. YATES. Do you have specific customers that you have lost?

Mr. SMITH. Yes, sir.

Mr. YATES. Whom have you lost?

Mr. SMITH. Well, I am not prepared to name any names, but we have lost the whole categories of business. All the screw machine rod users, for example, in the metropolitan area, now use foreign rod.

Mr. YATES. All of the screw machine operators now use foreign rod?

Mr. SMITH. Yes, sir.

Mr. YATES. Are you sure of this?

Mr. SMITH. Yes, sir.

Mr. YATES. You are a warehouser for whom—for Alcoa?

Mr. SMITH. Yes. I would like to show you this exhibit, sir, if I may.

Mr. YATES. I would be glad to see it.

Mr. Smith shows the committee a letter from C. Tennant Sons & Co. of New York, 100 Park Avenue, New York, N. Y., dated April 23, addressed to him at his address, 4–61 48th Avenue, Long Island City, N. Y., reading as follows:

GENTLEMEN: We are looking for a large user of 11ST3 aluminum rod in rounds ranging from ¼ inch to ⅞ inch diameter, inclusive. If you are in a position to buy in quantities of not less than 20,000 pounds at a time, we can offer you a price approximately 20 percent below domestic.

This is not surplus or distress merchandise. It is made by a prime British mill. If you would like further details, write or call us immediately.

Very truly yours,

C. TENNANT SONS & CO.

and so forth

The committee has a copy of this letter which may go into the record at this point.

(The letter referred to follows:)

C. TENNANT, SONS & CO., OF NEW YORK,
New York, N. Y., April 23, 1958.

Re aluminum rod.

ADAM METAL SUPPLY, INC.,
Long Island City, N. Y.

GENTLEMEN: We are looking for a large user of 11ST3 aluminum rod in rounds ranging from ¼-inch to ⅞-inch diameter, inclusive.

If you are in a position to buy in quantities of not less than 20,000 pounds at a time, we can offer you a price approximately 20 percent below domestic.

This is not surplus or distress merchandise. It is made by a prime British mill. If you would like further details, write or call us immediately.

Very truly yours,

R. TOPPER.

Mr. YATES. Did you hear the previous witness?

Mr. SMITH. Yes, sir.

Mr. YATES. Is it possible that some of your customers may be lost to some of the other big producers like Reynolds or Kaiser or the others? Apparently they are selling below published prices.

Mr. SMITH. I have no way of knowing that, sir, but so far as I know, the large domestic producers have not been able to compete with foreign rod. The difference is too great.

Mr. YATES. Why? Do you know what the costs of the company are?

Mr. SMITH. I have no way of knowing, sir.

Mr. YATES. That is why I wonder how you know that the difference is too great.

Mr. SMITH. Well, it just seems so. If you see a rod selling at around 50 cents a pound and there is a difference of 10, 11, or 12 cents a pound, you would think that was too much to cut off American prices in order to meet foreign prices. I know we cannot do it.

Mr. YATES. Ten or eleven cents a pound? What is the price per pound?

Mr. SMITH. Well, roughly screw machines start at around 50 cents a pound and goes up for the smaller diameters. The foreign rod comes in for about, or rather is being sold——

Mr. YATES. Do you have a comparison of prices between American and foreign prices other than the letter that you have shown the committee?

Mr. SMITH. No, sir; not with me.

Mr. YATES. Can you furnish that to the committee?

Mr. SMITH. Certainly.

Mr. YATES. I am sure the committee would like to have it.

Mr. SMITH. I can give it to you offhand from my knowledge of the business.

Mr. YATES. The committee would also like to have you furnish the customers whom you have lost to the importers.

Mr. SMITH. I could give them a list, though not at the moment.

Mr. YATES. We would like to go into that as well. Mr. Smith also furnishes to the committee a copy of a letter on the stationery of the Bershad International Corp., of 50 Church Street, N. Y., dated April 23, the same date as the previous letter, reading as follows:

GENTLEMEN: We are herewith enclosing a list of prime imported aluminum sheets which are available in our stock. This material is all packed, paper interleaved, in wooden cases of about 1,000 pounds each. This is not a cleanout or liquidation. We are simply offering our current inventory at prices slightly above the cost of this material if ordered direct from the foreign manufacturer. We would suggest the use of our stock to fill in any items for which you may be in immediate need.

Prices listed are duty paid, f. o. b. trucks free zone, Stapleton, Staten Island, N. Y., or f. o. b. trucks, Queens or New Jersey warehouses, depending upon the warehouse in which the material may now be lying.

If you desire, we are prepared to place orders directly, on your behalf, to the specific specifications required by you with the best Japanese manufacturers.

We believe these prices to be highly competitive and we will be pleased to hear from you as to any of your requirements.

Very truly yours.

Mr. SMITH. I jotted down the prices of the domestic mills alongside in pencil so you could have a comparison on the second page.

Mr. YATES. The comparison exists on the second page, and the letter together with the comparison may be placed in the record at this point.

(The documents referred to are as follows:)

BERSHAD INTERNATIONAL CORP.,
New York, N. Y., April 23, 1958.

GENTLEMEN: We are herewith enclosing a list of prime imported aluminum sheets which are available in our stock.

This material is all packed, paper interleaved, in wooden cases of about 1,000 pounds each. This is not a cleanout or liquidation. We are simply offering our current inventory at prices slightly above the cost of this material if ordered direct from the foreign manufacturer. We would suggest the use of our stock to fill in any items for which you may be in immediate need.

Prices listed are duty paid, f. o. b. trucks, free zone, Stapleton, Staten Island, N. Y., or f. o. b. trucks, Queens or New Jersey warehouses, depending upon the warehouse in which the material may now be lying.

If you desire, we are prepared to place orders directly, on your behalf, to the specific specifications required by you with the best Japanese manufacturers.

We believe these prices to be highly competitive and we will be pleased to hear from you as to any of your requirements.

Very truly yours,

IRVING BERSHAD, *President.*

Stock list, prime aluminum sheets

ALLOY NS H/4

Thickness	Size	Quantity	Price	Alcoa base
		Pounds		
0.016 inch	36 inches by 94 inches	3,952.8	$0.40	0.419
0.020 inch	36 inches by 96 inches	4,587.6	.40	.462
0.025 inch	36 inches by 36 inches	6,990.4	.40	.482
0.025 inch	48 inches by 144 inches	6,025.2	.40	
0.032 inch	36 inches by 36 inches	33,550.7	.39	.446
0.040 inch	36 inches by 36 inches	1,509.9	.39	.442
0.040 inch	46 inches by 144 inches	998.7	.39	
0.051 inch	36 inches by 96 inches	11,648.6	.39	.436
0.051 inch	48 inches by 96 inches	5,811.3	.39	
0.051 inch	48 inches by 144 inches	3,474.6	.39	
0.064 inch	36 inches by 96 inches	33,054.1	.39	.429
0.072 inch	36 inches by 96 inches	11,014.2	.39	
0.081 inch	36 inches by 96 inches	10,993.9	.39	.425
0.091 inch	76 inches by 96 inches	9,984.6	.39	
0.125 inch	36 inches by 96 inches	4,013.4	.39	.416
	ALLOY 52S M24			
0.032 inch	36 inches by 96 inches	12,479.7	$0.43	0.52
0.040 inch	36 inches by 96 inches	10,474.5	.43	.504
0.051 inch	36 inches by 96 inches	10,516.0	.43	.492
0.064 inch	36 inches by 96 inches	1,264.0	.43	.476
0.081 inch	36 inches by 96 inches	9,001.0	.43	.469
0.091 inch	36 inches by 96 inches	2,018.0	.43	.469
0.125 inch	36 inches by 96 inches	1,046.0	.43	.459
0.125 inch	48 inches by 96 inches	4,406.9	.43	.459

NOTE.—Alcoa boxing in 1,000 lots, add 3 cents per pound and 0.015 for inwholesaling.

Mr. YATES. Mr. Sheehan.

Mr. SHEEHAN. No questions. I might want to ask, though, do you handle any foreign imported aluminum at all?

Mr. SMITH. No, sir.

Mr. SHEEHAN. You are tied up because of your exclusive representation of the people you represent, or you don't desire to handle it?

Mr. SMITH. No. Well, both are true. We have had experience handling foreign metal in the past before we were distributors. It is a very unsatisfactory business as far as we are concerned.

Sometimes you get it, sometimes you don't.

Mr. YATES. You are Alcoa's representative in how big an area?

Mr. SMITH. Well, there are several others besides us in the metropolitan area of New York City.

Mr. YATES. Does Alcoa sell directly in the areas in which you hold your representation?

Mr. SMITH. Yes, sir.

Mr. YATES. Do you compete with Alcoa in the sale of these products?

Mr. SMITH. No, sir. They serve as mill producers and suppliers. We serve as warehouse suppliers.

Mr. YATES. Do they sell the same products in your territory that you sell?

Mr. SMITH. Yes, sir.

Mr. YATES. Well, then, I don't quite understand why you are not competing with them.

Mr. SMITH. I took the pains to make that function clear in my presentation and perhaps labored it a little bit strongly but perhaps I wasn't clear enough. If you take a company like Republic Aviation that has their production plant for a certain plane, they may need

for a certain order for planes 10 million pounds of aluminum. They will place that order with the Aluminum Company of America or Reynolds or Kaiser, whichever it is their pleasure. But on the other hand——

Mr. YATES. For the furnishing of a small amount?

Mr. SMITH. Well, there may be one little part that would require 500 pounds of a size and gage. They can't put this order for 500 pounds on the mill because it costs too much. And then at different times in the course of their production, they may spoil some or they may need some for experimental purpose, and if every time they needed a small quantity, they had to wait until they put a special order on the mill, they'd never make any planes.

Mr. YATES. Are you permitted to sell below Alcoa's published prices?

Mr. SMITH. We never do.

Mr. YATES. Do you know whether the other companies do?

Mr. SMITH. I don't think that they do, because our own competitors, who are mill distributors either for Alcoa or some other domestic mill, we generally stick pretty closely to our prices because we don't make enough profit to cut our prices very much.

We'd be silly if we did. We mark up enough to make a fair profit. It is not a business that you get rich in. It is a small supply business, and we generally have our prices marked up enough to allow us a fair return, and that is about it.

And our prices are stable, no matter who comes along. If there is a shortage of aluminum, those are our prices. If there is a surplus of aluminum, we'd like to get the same prices because there never was much in it to begin with.

Mr. YATES. Do you warehouse redraw rod?

Mr. SMITH. No, sir.

Mr. YATES. Is there a reason for this?

Mr. SMITH. Yes. We do stock some wire and rod, and it might be that a company like Mr. Kagan, who testified before, might need for a special order some alloy that he would not stock in large quantities, such as 3's, 2's, and of a size that he might run out of. So he would pick up 500 pounds from us to keep him going until the mill shipment came in.

Mr. YATES. Would you be surprised if Alcoa and Kaiser were selling redraw rod at 5 cents below their published price?

Mr. SMITH. I just learned it this morning. I didn't know it before. It did surprise me.

Mr. YATES. It did surprise you?

Mr. SMITH. Yes, sir.

Mr. YATES. Is this the only instance where you have ever heard of this happening?

Mr. SMITH. Well, it happened in a trade or in a section of the industry which recently adjusted itself to a lower level.

That is on the basis of the independent extruder who had persistently cut the mill prices, and finally all the producers decided to get down to the level of the independent producer.

Mr. YATES. If you stopped this redraw rod and Alcoa and Kaiser cut the published price below 5 cents, you would be out of business, wouldn't you?

Mr. SMITH. Certainly would.

Mr. YATES. Thank you very much, Mr. Smith.

We are grateful for your coming before us and telling us your views.

The committee will stand in recess until tomorrow morning at 10 and we will meet in this room.

At that time the committee will hear from Mr. C. A. Macfie, president of Revere Copper & Brass Co., Inc.

(Whereupon, at 11:30 a. m., the committee adjourned to reconvene at 10 a. m., Thursday, May 1, 1958.)

ALUMINUM INDUSTRY

THURSDAY, MAY 1, 1958

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON MINERALS AND
RAW MATERIALS OF THE SELECT COMMITTEE
TO CONDUCT A STUDY AND
INVESTIGATION OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10:20 a. m., in room 1304, New House Office Building, Hon. Sidney H. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding) and Sheehan.

Also present: Irving Maness, counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The committee will come to order.

There may be inserted in the record at this point the statement respecting imports and domestic producer shipments of aluminum sheet rod and bar for 1957 which has been furnished to the committee by the Department of Commerce, Aluminum and Magnesium Division, dated April 30, 1958.

(The statement referred to follows:)

Imports and domestic producer shipments of aluminum sheet, rod and bar, 1957

[Thousands of pounds]

	Imports	Domestic gross shipments	Domestic net shipments [1]	Percent of gross	Percent of net
Sheet and plate	[2] 36, 908, 000	[3] 1, 363, 082	1, 192, 464	2. 7	3. 1
Sheet, plate, rod, bar	[4] 39, 264, 000	[5] 1, 527, 357	1, 309, 329	2. 6	3. 0

[1] Gross shipments minus receipts by producers from other producers.
[2] Estimated at 94 percent of imports of "plates, sheets, bars, rods, circles, squares," based on analysis of September 1957 imports.
[3] Gross shipments of "plate, sheet, strip" as reported by the Bureau of the Census, excluding foil.
[4] Imports of "plates, sheets, bars, rods, circles, squares," as reported by Bureau of the Census.
[5] Gross shipments of sheet and plate and rolled rod, bar, and structural shapes as reported by the Bureau of the Census.

Source: Department of Commerce, BDSA Aluminum and Magnesium Division., Apr. 30, 1958.

Mr. YATES. The committee is also in receipt of a letter of Kaiser Aluminum & Chemical Corp. dated April 29, 1958, in reply to my letter of April 16, which I read into the record yesterday. In all fairness, I should read the Kaiser letter, too. It reads as follows:

DEAR CONGRESSMAN YATES: In reply to your letter of April 16 regarding our reduction in the E. C. redraw rod price, we wish to advise you that the conclusions drawn by Southwire are incorrect. This price revision will materially assist small business and will provide a substantial number of wire fabricators with an additional opportunity to use aluminum in new markets.

The revised redraw rod price will make it possible to use aluminum in competition with copper in building wire, in the electrical appliance market, in the electrical apparatus market and in the manufacture of such applications as magnet wire, transformer windings and communications cable. There are some 30 suppliers in the building wire field alone.

In 1955 we forecast that within the next 10 years aluminum usage in these markets would increase over 800 percent. With the drop in the price of copper, however, the growth of aluminum in these markets virtually ceased. Most of the manufacturers of these products produce them from E. C. redraw rod and the revision in the redraw rod price will therefore provide a strong impetus for renewed growth in these fields.

The reduction in the redraw rod price was also necessary to maintain the competitive position of nonintegrated cable manufacturers who produce cable from redraw rod. Many of these producers are small-business men. A few cable manufacturers, including Southwire, use aluminum pig as their starting raw material and produce their own redraw rod by the use of a continuous casting machine called a "Properzi" machine. The production of cable from redraw rod at the redraw rod price in effect prior to our recent revision was not competitive with the Properzi process and consequently producers who did not have their own Properzi machines and who purchased redraw rod were at a disadvantage. As a result the redraw rod market was rapidly drying up. In 1957 our redraw rod sales were only one-third of our 1956 redraw rod sales.

Last fall Southwire initiated a drop in wire and cable prices and we received requests from nonintegrated cable producers to reduce our price of E. C. redraw rod.

The present reduction meets this demand and will materially assist the many nonintegrated cable producers who use redraw rods as their starting raw material. As an example, we are attaching a copy of an unsolicited letter from Central Cable Corp., a nonintegrated producer of covered or insulated wire, stating that the revised price will be extremely helpful to them.

The revised price also takes into consideration the recent reduction by 2 cents per pound in the price of aluminum pig.

With respect to the statement of Southwire that the new redraw rod price eliminates them from the redraw rod market, it is apparent from the 66⅔ percent drop in the redraw rod market in 1957 that this market would become nonexistent if former price schedules were continued. Participation in a vanishing market would be of no benefit to any producer.

Actually, we believe if you will ascertain from Southwire the quantity of redraw rod sold by them in the domestic market and the prices at which they made such sales, you will find that Southwire is not in the redraw rod business.

Basically, Southwire is in the cable business and any sales of redraw rod made by Southwire were, to the best of our knowledge, purely incidental. We believe that Southwire's real objection to the new redraw rod price is that as a cable producer using the Properzi process they will no longer have the same competitive advantage formerly held over the cable producer who uses redraw rod as his starting raw material. While this advantage may be lost, we believe that Southwire, along with all other wire producers, will gain from the impetus given the use of aluminum in new electrical markets as stated in the first part of this letter.

Very truly yours,

D. A. RHOADES,
Vice President and General Manager, Kaiser Aluminum & Chemical Corp.

To this letter of Kaiser is attached a letter from Central Cable Corp., a copy of a letter addressed to:

Mr. D. A. RHOADES,
Vice President and General Manager, Kaiser Aluminum & Chemical Corp., Oakland, Calif.

DEAR MR. RHOADES: This is to report that Messrs. Niveling and Walker have just visited us in Jersey Shore and outlined Kaiser's new policy on EC redraw rods. We appreciated their coming to see us personally and feel that the step your company has taken in behalf of insulators like ourselves has been extremely helpful to us.

When we can get some more aluminum orders at profitable price levels, we promise to increase substantially our purchases of aluminum rods from your good company. We are looking forward to the arrival of this condition in our industry and want to thank you again for your considerations of our problem.

Very truly yours,

CENTRAL CABLE CORP.,
JOHN G. DETWILER, *President.*

The committee has before it today as its witness Mr. Charles A. Macfie, who is president of the Revere Copper & Brass, Inc.

Mr. Macfie, will you come to the witness stand?

Mr. MACFIE. Yes, sir.

Mr. YATES. Will you identify, as you identify yourself, also the name of your counsel for the record.

TESTIMONY OF CHARLES A. MACFIE, PRESIDENT, REVERE COPPER & BRASS, INC., ACCOMPANIED BY WILLIAM F. COLLINS, GENERAL COUNSEL

Mr. MACFIE. My name is Charles A. Macfie, and I am president of the Revere Copper & Brass, Inc., and our general counsel, Mr. William F. Collins.

Mr. YATES. Thank you, sir.

Mr. MACFIE. Now, with your permission, I would like to read this statement, if I may.

Mr. YATES. You may, indeed.

Mr. MACFIE. Mr. Chairman and gentlemen of the committee, my name is Charles A. Macfie. I am president of Revere Copper & Brass, Inc., a Maryland corporation. My office is located at the executive offices of the company, 230 Park Avenue, New York, N. Y.

I appreciate the opportunity to appear before the committee and to tell you something about our company, its position in the aluminum industry, and our relations with small business in the industry.

As the name of our company indicates, it was founded by Paul Revere who, among his other distinctions, was one of this country's pioneer industrialists. In 1801, Paul Revere erected at Canton, Mass., the first successful copper rolling mill in America and thereby founded our company and one of our important American industries.

When Paul Revere's son, Joseph Warren Revere, joined his father in the business it became known as Paul Revere & Son, which in 1828 became the Revere Copper Co. The successor to this company, the Taunton-New Bedford Copper Co., continued its historical associations with Paul Revere through its president, the late E. H. R. Revere, the great-grandson of the founder. Mr. Revere served for many years as a member of the board of directors of Revere Copper & Brass, Inc., up until his death last year.

The present company of Revere Copper & Brass, Inc., was formed in 1928 as a consolidation of the Taunton-New Bedford Copper Co. and 5 other companies, 2 in Detroit and the others in Baltimore, Chicago, and in Rome, N. Y.

The consolidation gave the United States a strong new factor in metals fabrication—the Nation's oldest and largest independent fabricator of copper and brass products and now one of the country's leading independent producers of aluminum mill products.

Today, Revere Copper & Brass, Inc., has over 7,000 stockholders. In 1957, our average number of employees was about 8,500. Currently the number of employees is somewhat less, but we are doing our utmost to keep our plants active and our men at work.

Revere's organization is based on responsible local management of its 12 divisions, which are organized according to plant locations or products.

These divisions operate a total of 17 plants, located as follows: In Arkansas, 1 foil plant at Newport; in California, 3 plants—1 at Los Angeles, another at Riverside, and a new strip mill at Santa Ana; in Illinois, 5 plants—2 at Chicago, another at Joliet, and 2 at Clinton, including a tube mill now nearing completion; in Maryland, 2 plants in Baltimore; in Massachusetts, 1 plant at New Bedford, the successor of the original Revere works; in Michigan, 1 plant at Detroit, principally serving the automobile industry; in Nebraska, 1 plant at Fort Calhoun, near Omaha; in New York, 3 plants—1 at Brooklyn, producing foil, and 2 at Rome, N. Y., including our largest Revere Ware utensil plant.

Among these plants the following work on aluminum: The Newport, Ark., plant, the two Chicago plants, and the one at Joliet, Ill.; both the Baltimore plants; the one at Fort Calhoun, Nebr., the plant at Brooklyn, and one of the plants in Rome, N. Y.

Revere's products include a wide range of items in copper, brass, bronze, nickel silver, cupro-nickel, aluminum, and steel; Revere Ware copper-clad stainless-steel kitchen utensils, and other mill products.

Attached at the end of this statement are 4 pages taken from Revere's 1957 annual report, which supplement the foregoing information about the company's plants and products, and a map showing the plant locations.

Revere's present aluminum development was a logical outgrowth of the company's years of experience in the fabrication of copper and brass products. The company had developed a know-how in the treatment and handling of metals, and it also had the facilities.

Furthermore, as an aluminum fabricator as well as a fabricator of copper and brass products, Revere could be impartial in its recommendations to customers and urge the use of the metal which most satisfactorily meets customers' needs. We also recognized that, although copper and brass are far from static, aluminum offers the greatest growth potential of any present-day metal.

In fact, the tendency of copper in recent years to fluctuate widely in supply and price has brought about some substitution of aluminum for a few of the time-honored uses for copper.

Currently, the volume of imports of copper and brass products from England, the continent of Europe, and Japan has caused a serious loss of business for the brass mill industry in the United States.

A similar harmful import situation is also developing in aluminum. Revere, therefore, favors legislation or other relief which will protect our stockholders' investment and the jobs of our employees.

Revere's growth in aluminum fabrication has not only enabled the company to recapture markets that have been lost in copper, but it has enabled it to reach new markets and new customers.

Until recently, Revere's position in the aluminum industry has been that of an independent fabricator of aluminum mill products.

The corporation's background in aluminum dates from the year 1922. One of the companies which became part of Revere was the Michigan Brass & Copper Co., of Detroit.

That company was an important producer of brass and bronze extruded shapes. In 1922, it added aluminum extruded shapes and moldings. These were extensively used by the automotive industry, and the Detroit plant became a recognized center for extruded metals.

That fact was emphasized when it was called upon to extrude uranium for the Manhattan project.

Revere's next important steps in aluminum came with World War II, when the requirements for aluminum far exceeded the existing productive capacity of the industry. Revere's Baltimore, Md., division, one of the Nation's large producers of copper tubing, undertook to design, build, and operate an aluminum tube mill for the Government. It consistently exceeded its rated capacity, and received, as part of Revere's Baltimore operations, the Army-Navy "E." It was one of the very few mills at that time able to produce high-strength heat-treated aluminum tubing for the frames of military aircraft. After the war, a portion of this equipment was purchased by Revere from the Government.

Another wartime project was begun in Baltimore by Revere, with equipment leased from the Government, for the rolling and extrusion of magnesium alloys, primarily for aircraft use. At the time of its full operation, this was one of the largest magnesium sheet mills in the world. It later became the nucleus for Revere's production of aluminum sheet.

During the war period, Revere was also producing nonferrous forgings and stampings, including aluminum, at 1 of its 2 plants in Rome, N. Y. These wartime products have since been continued as a factor in the corporation's growing aluminum program.

Another major development was the start of operations in 1944, the extrusion plant at Halethorpe, Md., which Revere operated for a nominal management fee. This plant was for the alloying, casting, and extrusion of aluminum tube stock; for the production and heat treating of aluminum and magnesium extruded shapes; and also for producing large magnesium and aluminum forgings. The postwar usage of magnesium could not support continued operation of the Halethorpe plant and in 1946 it was closed and later disposed of by the Government.

As part of its reconversion to peacetime production, Revere, in 1946, installed new equipment in its Baltimore aluminum facilities to produce aluminum extruded shapes in addition to aluminum tubing, with the accompanying alloying and casting equipment. Shortly thereafter, further tools and equipment for aluminum extrusions were transferred to Baltimore from the plant in Detroit in order to center all such aluminum operations in one location. The former Revere magnesium sheet mill in Baltimore was converted and reequipped to produce aluminum sheet, and production was begun in 1948.

By actively seeking new and expanded markets for its aluminum products and by a continuing program of plant and equipment expansion, Revere had become recognized by 1954 as one of the country's leading nonintegrated fabricators of aluminum products. As a part of the expansion program, Revere installed its own casting facilities, and modernized and extended its plants and equipment so that it could produce material in wider widths and longer coils.

Revere's start in the fabrication of aluminum foil began in 1955 at the plants in Brooklyn, N. Y.; Newport, Ark.; and Chicago, Ill. Revere's aluminum sheet mills supply the foil mill with aluminum coiled sheet for rerolling into foil.

A substantial aluminum sheet mill was added during 1955–56 to the existing Revere copper and brass mill in Chicago.

Revere extended its aluminum foil business in 1956 by getting into the production of aluminum foil food containers in the plant at Fort Calhoun, Nebr. An addition to this plant has been completed as of the first of this month and is just now coming into production. The foil material for containers comes from the Revere aluminum foil mill in Newport, Ark., which in turn obtains its raw material from Revere's aluminum sheet mills at Baltimore.

Revere has directed its marketing activities principally toward the manufacturing and metal-working industries avoiding, where possible, entering into competition with its own customers.

Aluminum mill products fabricated by Revere include tube and pipe, coiled and flat sheet, extruded and roll formed shapes, rod and bar, forgings, foil, foil containers and a variety of other mill products, all of which start with pig or ingot which Revere currently purchases at prevailing market prices from one or more of the existing primary aluminum producers. In the folders accompanying your copies of this statement are some samples of our literature describing these products.

Revere's products are sold to a large number of customers in the many industries that use aluminum through the following channels:

(1) Through direct sales to industry.

(2) Through metal distributors, who are the established suppliers of mill products of this kind to smaller plants in the United States, and who make quick deliveries out of warehouse stocks.

(3) Through sheet metal and other distributors who serve the building and construction industries.

These sales are made by over 30 sales offices strategically located in key cities throughout the United States.

Of particular value to our customers is Revere's Technical Advisory Service, which was set up in the 1930's to supply practical information to users of metals. A staff of engineers, well grounded in metallurgy and the various metalworking processes, was organized and one or more were assigned to the sales headquarters of each Revere plant. If any customer or prospective customer experiences problems in the use of metals or is in doubt about which metal process or product to use, the services of a Revere technical adviser are available to him without obligation. One of these men visits the manufacturer in question, familiarizes himself with the details of the problem, makes recommendations and stays in close touch with the matter until a satisfactory outcome is reached.

Should a problem require scientific investigation or laboratory study, it is placed in the hands of the Revere research and development department for solution. In all of these matters Revere takes pride in its impartiality.

Being a fabricator of copper, brass, bronze, aluminum, and even certain steel products, Revere feels no incentive to favor one metal above another.

It is believed that this service has been and will continue to be of tremendous value to all metal users and especially those who cannot afford comparable facilities of their own.

The majority of Revere's aluminum customers are small concerns, which is evidenced by the attached exhibit prepared by our market research department. It shows that 56 percent of our customers each purchased less than 10,000 pounds from Revere in 1957.

(The exhibit referred to appears in the appendix, p. 466.)

Just looking at that analysis of the breakdown which we have brought out primarily to show our great interest in the small-business men, the under 10,000 buyers are 56 percent of our total customers. They represent only 3 percent of our total pounds.

In the area of over 10,000 to 100,000 pounds annually, 33 percent of our customers represented 24 percent of our total pounds. Over 100,000 to 500,000 pounds annually, 9 percent of the total customers represent 38 percent of the total pounds, and over 500,000 pounds exclusive of interplant shipments we have 2 percent of the customers representing 35 percent of the total.

Then we give a market breakdown which is available to you showing that our distribution of our sales to the building products field was 38 percent of our total; to the consumer durable goods, 17 percent; transportation, 8 percent; electrical, 5 percent; machinery and equipment, 6 percent; containers and packaging, 8 percent; distributors and jobbers, 9 percent; and miscellaneous, 9 percent.

Mr. YATES. Are these roughly about the same percentages as you found for the first few months of 1958, too.

Mr. MACFIE. We have not broken down our figures yet for 1958. We have not had time to gather the information, but I would imagine it would follow pretty much this same pattern.

Mr. YATES. Would you say that was true of 1956, too?

Mr. MACFIE. 1956 analysis was very close to this breakdown here.

The aluminum mill products fabricated by Revere start with aluminum pig and ingot purchased from the established producers of primary aluminum.

In fairness to our customers, who depend on Revere as a regular supplier, we have had to make the commitments necessary to secure aluminum to serve them. Beginning in the early 1950's and continuing through 1955, when aluminum was in extremely short supply, Revere was required to enter into a series of large, firm, long-term contracts with the aluminum producers in order to assure to Revere and its customers the essential supplies. These contracts have not involved any price concession to Revere. When we made the last contract there appeared to be no possibility of our getting into primary production for several years.

It became clear, however, that Revere would ultimately have to secure its own source of primary aluminum.

Accordingly, Revere began to study the matter of entering into primary aluminum production. The studies were directed toward the construction of a 60,000-ton reduction plant.

During the course of such studies, Revere learned that Olin Mathieson Chemical Corp. was contemplating the construction of a facility to produce 120,000 tons of aluminum annually. It appeared to both companies that it would be mutually advantageous to combine the 2 projected facilities into a 180,000-ton plant which would afford greater operating economies and a more efficient operation than would either facility alone.

Negotiations were entered into and an agreement reached in the summer of 1956, pursuant to which a new corporation, Olin Revere Metals Corp. (now Ormet Corp.) was organized for the purpose of producing primary aluminum.

The Ormet facilities include:

(1) A 345,000-ton alumina plant being built with deep water dockage at Burnside, La.

(2) Chartered barges to transport the alumina up the Mississippi and Ohio Rivers from Burnside to the reduction plant on the Ohio River.

(3) A 180,000-kilowatt power station to be owned by a 100-percent subsidiary of Ormet, Ormet Generating Corp., and to be powered by coal mined directly on the site at Cresap, W. Va., which is across the Ohio River from the reduction plant.

Details of the financing of the Ormet aluminum project are contained in the statement and testimony of Mr. Walter F. O'Connell, president of Ormet, and will not be repeated here.

By agreement, Ormet's output of primary aluminum will be taken at cost—66 percent by Olin Mathieson and 34 percent by Revere. Any cost predictions at this point would be quite theoretical and arbitrary.

We do know, however, that the Ormet facility, just as any other new aluminum project, will have substantial preoperating and startup costs.

Ormet is owned 50 percent by Olin Mathieson and 50 percent by Revere. Olin Mathieson has the option to increase its ownership to 66 percent by buying part of Revere's interest at Revere's cost. The 66–34 division of output resulted from arm's-length bargaining between the parties. It reflects, among other things, the facts that, when the 2 parties decided to join forces, Olin Mathieson was somewhat further advanced with its plans than Revere and that Olin Mathieson contemplated a 120,000-ton plant. If Olin Mathieson should decide to exercise its option, the parties' holdings of Ormet's securities will conform to the 66–34 division of output.

I am advised that Ormet is starting up its first pot line this week and that the alumina plant at Burnside was started up about April 21. Revere has placed its first order for primary aluminum with Ormet and we hope soon to begin receiving metal. During the balance of this year we expect to receive primary aluminum from Ormet in increasing quantities until full production is reached in the last quarter of this year or the first quarter of 1959.

Some of the metal will, of course, support Revere's own production. However, Revere is planning to sell a substantial part of the Ormer production as primary aluminum to other fabricators.

Revere's policy will be to sell primary aluminum at all times, assuring our customers of continuous, dependable supplies. We will take care of our customers' needs without requiring them to make long-term contractual or other commitments to us.

In relation to the three large primary producers, Revere is still a very small factor in the aluminum industry. We are confident, however, that Revere and its people have the experience and the skills to compete effectively in the industry. While at present there is an oversupply of aluminum, we believe that the industry will resume its pattern of growth and Revere hopes to contribute to and participate in that growth.

Mr. YATES. Thank you, Mr. Macfie, for an excellent statement. The committee is, of course, aware of the high position that your company has occupied in the metals industries of our country for a

long time, and we are very grateful for the information that you have given us.

We are interested in a little more information pertaining to your entry into the aluminum field. On page 7, you indicate that when aluminum was in extremely short supply, Revere was required to enter into a series of long-term contracts in order to assure yourself and your customers essential supplies.

Did you find that you were unable in 1955 to get the metal that you needed for your purposes and for your customers?

Mr. MACFIE. I think in 1955 that you have a situation where nobody was at all happy with what they could get, because the demand for the product was so much larger than it had been at any other time, there was bound to be a created shortage. So we, like others, I guess, were suffering from the lack of enough material that we could sell at that time.

Mr. YATES. I notice that you had long-term contracts. Were you able to get all the metal that you were contracted for?

Mr. MACFIE. When we entered into these contracts, we obtained what we needed and what we foresaw we would need in the years ahead.

Mr. YATES. When did you decide to go into the aluminum business?

Mr. MACFIE. Are you going back to the fabricating or the primary?

Mr. YATES. Primary.

Mr. MACFIE. We began our studies of entering the primary business in 1955, the early part of 1955, possibly the latter part of 1954. Looking ahead as our ambitions were to grow in this industry, we had seen ourselves improve, we felt that the logical step for us would be to review the possibility of entering the primary market, and as a consequence, we assigned people to make a study of the availability of power, plant sites, alumina, and decided that if we could arrange financing, if we could get a certificate of amortization with the Government, that we would go into the primary business.

Mr. YATES. Did you get your certificate?

Mr. MACFIE. We did not.

Mr. YATES. Was there a reason ascribed?

Mr. MACFIE. The reason ascribed by Dr. Flemming at the time was that the aluminum program was closed.

Mr. YATES. When was this?

Mr. MACFIE. That was in 1955. I think we have some chronological dates. It might be just as well to put it on the record.

Mr. YATES. I don't understand this. As I remember it, the contract that Harvey received from the Government was dated September 1955.

Mr. MACFIE. That is correct.

Mr. YATES. When did you talk to Dr. Flemming, when in 1955?

Mr. MACFIE. I think we have a record here. Our application was filed on August 2, 1955, for facilities with an estimated cost of $52,776,000, with a production of 120,000 tons of alumina and 60,000 tons of aluminum pig and ingot.

Mr. YATES. Was this the first step that you took?

Mr. MACFIE. That was the first step to apply for a certificate.

Mr. YATES. You had not spoken to Dr. Flemming before?

Mr. MACFIE. We had not spoken to him directly on the subject. And then in September 1955, the GSA announced signing a contract with Harvey for long guaranty advance payment purchase guaranties with respect to a $56 million plant in The Dalles, Oreg.

Again in September, GSA had a press release on the background of the Harvey contract, which is on the record.

On September 22, 1955, ODM announces closing expansion goal for primary aluminum production.

On October 12, ODM denied Revere's application on grounds that there was no present or prospective shortage in capacity.

Then we followed it up with letters to Dr. Flemming, which were delivered in person by Mr. Wilson, who is in charge of our aluminum sales and our Washington counsel, Mr. Jack Cardon.

Then we had a subsequent letter from Dr. Flemming in February of 1956 in which he claimed there was no discrimination and that the goal was closed.

We followed it up again with another letter stating that the Harvey project had not been started, that the Alcoa expansion at Massena would not be available until 1959 and 1960, and that certain non-certified expansions of Reynolds and Kaiser are possible because of favorable market guarantee contracts with the Government.

Mr. Flemming's reply to this letter stated again that the capacity was more than enough to meet the definite needs, and the conditions are such that further incentive is unnecessary.

We had a further letter from Mr. Stanley N. Barnes, Assistant Attorney General, Antitrust Division, concerning a denial of the application and the effect on Revere's entering the primary field which we answered, stating our position, but nothing happened.

We did not get a certificate.

Mr. YATES. Over what period of time did these discussions take place?

Mr. MACFIE. Started from August of 1955 until April 1956.

Mr. YATES. In the course of the conversations, was it indicated why Harvey was receiving the tax-amortization certificates and the contract and why your application was being rejected?

Mr. MACFIE. No, I don't think so, other than to say that there had been—and this I think was through a press release, that from the inception of the first round and continuing to the present, the Antitrust Division of the Department of Justice and various congressional committees, such as the Joint Committee on Defense Production, and the House Committees on Judiciary and Small Business, have strongly and repeatedly urged that the Government bring one or more new independent producers into the field in order to broaden the competitive base and to strengthen national defense.

And I think that was the background about the time of the Harvey release. I don't know when they applied, and I haven't got the details of that. But we felt at that time that we were not being treated in the same manner as other producers in the aluminum industry.

We did not ask for any contracts. We just asked for a certificate of amortization.

Mr. YATES. Did you seek to purchase any tax amortization certificate or to buy one? Anaconda made an arrangement with Harvey under the terms of which they both went into business together, and

subsequently Anaconda purchased Harvey's interest in the firm which had the tax-amortization certificate.

Did you seek to make the same sort of an effort to obtain a tax-amortization certificate?

Mr. MACFIE. No. Our only approach was what we felt was a proper way, to apply through the ODM and General Services Administration for tax certificates to support this projected facility.

Mr. YATES. Did you also seek a contract comparable to those which the Government gave to Reynolds, to Kaiser, to Alcoa and to Harvey for the purchase of your surplus aluminum?

Mr. MACFIE. No, we told them that we did not seek any contract governing the actual output of the metal to the Government. All we asked for was the assistance in the form of tax amortization.

Mr. YATES. As I recall that period, there were tax amortization certificates that were being given to other businesses at that time.

Mr. MACFIE. I think at that time and subsequent to that time.

Mr. YATES. Yes?

Mr. MACFIE. But not as far as we know in the aluminum industry. I think they were closed. The last one probably was the Harvey, as far as my recollection goes.

Mr. YATES. You have indicated that you proposed to sell primary metal. Will this be sold at the published price?

Mr. MACFIE. It will be.

Mr. YATES. When Mr. O'Connell was before us, I asked him about the possibility of selling metal cheaper than the published price and he indicated that it couldn't be done, because anything lower than the published price, and I quote his answer:

> Anything lower than the published price would, in my judgment, provide completely inadequate return on the large investment made in the aluminum facilities.

At the time he testified the published price was $0.26. I asked him the additional questions:

> If Alcoa or Reynolds decides to cut the price by 1 cent would you follow suit?

He said:

> We would have to because we would be in a position of offering metal at 1 cent over the published price, we would sell absolutely none.

I asked:

> If Alcoa and Reynolds wanted to drive you out of business, according to your previous statement, inasmuch as you have a low-profit factor, all they'd have to do is cut the price by 1 cent or 2 cents?

And Mr. O'Connell said:

> I suppose if this continued, our company would end up out of business although we have a rather substantial earning capacity other than aluminum.

The price is now $0.24?

Mr. MACFIE. Yes.

Mr. YATES. Does this mean that when you sell primary metal at $0.24, that you will be losing money?

Mr. MACFIE. I don't think we could answer that question directly, because we haven't any costs out of this new facility. It has just turned over this week. The first potline got started.

But on a projected cost basis, I would hope that we would have some profit, but we won't have as much as we would have had at $0.26.

Mr. YATES. Is there a possibility you may sell more metal at $0.24 than you would at $0.26 to make up the difference?

Mr. MACFIE. I doubt it very much indeed, I doubt it very much.

Mr. YATES. Incidentally, what is happening to your sales? Are they going up over last year? How is the aluminum business now?

Mr. MACFIE. I think the aluminum business is about holding its own in relation to last year. There is an indicated slight improvement, I think, in April, but I think it is so little that it doesn't foretell any trend at the moment.

Mr. YATES. How is your company's business?

Mr. MACFIE. Overall or in just aluminum only?

Mr. YATES. I know overall you are doing pretty well; aren't you?

Mr. MACFIE. Not as well as we should.

Mr. YATES. Your answer to that question would always be the same; wouldn't it?

Mr. MACFIE. No. We have had some years we have been reasonably proud, but we are not proud now.

Mr. YATES. Is that the fault of your company or the fault of other factors?

Mr. MACFIE. No, I think it is just simply an indication in the decline in the volume of business which is rather severe anyway, and particularly for people in the metal field at the moment.

We are vitally interested and vitally affected by what happens in the automotive industry. It represents to Revere in its copper and brass around 25 percent of our normal sales of copper and brass products.

Aluminum, of course, is a very incidental thing with us at the moment.

Mr. YATES. And because of the condition of the automobile business, why Revere also is in a depressed state?

Mr. MACFIE. That is right. Our volume is down very materially. We are also down, I would like to reemphasize, we are down very materially by the effect of imports of copper and brass which has reached a very serious condition in the industry.

It is a threat, a serious threat to the overall price structure. I think it is a very serious threat to the profit, and it certainly imposes a very definite threat to our employees.

Mr. YATES. Where are the imports coming from?

Mr. MACFIE. They are coming from England, West Germany, Belgium, Italy, Japan largely, and Chile.

Mr. YATES. Are we talking about fabricated copper and brass?

Mr. MACFIE. We are talking about fabricated products in the form of sheet, rod, tube, and in that category.

Mr. YATES. Is there not a tariff on these products now?

Mr. MACFIE. There is no tariff at present on prime copper coming into the country.

There is a reduced tariff on the fabricated products reduced materially from what was in effect in the original 1930 agreement. It has been reduced 50 percent, and it has had subsequently 3 declines of 10 percent each, so that it has reduced the tariff very materially.

Mr. YATES. Do you find competition in fabricated aluminum products and semifabricated?

Mr. MACFIE. I think that is beginning to become effective. We notice more of it, and the prices, of course, are rather startling to us,

and the fact that we cannot possibly meet them. We can't match their low labor costs, so that we have nothing much to do but pass up the business which we don't like to do.

Mr. YATES. On page 3 you made this statement:

> We also recognize that although copper and brass are far from static, aluminum offers the greatest growth potential of any present-day metal.

Is this one of the reasons you are moving out of copper and brass and into the aluminum field, or do you propose to continue in copper and brass and augment your production with aluminum?

Mr. MACFIE. Our purpose is to continue very actively in the copper and brass business because basically that is where we started, but we intend to augment our facilities with the sale of aluminum.

In other words, we could sense the loss of markets, so when you are losing something, you had better join them.

Mr. YATES. That is right.

Mr. MACFIE. And that is what we did.

Mr. YATES. Is aluminum taking away more and more copper markets?

Mr. MACFIE. It is encroaching, yes, with the very good reason it has economic advantages and the metal performs equally well under certain circumstances, so that you cannot fight that situation.

You might just as well recognize it, and it is cheaper.

Mr. YATES. This makes me wonder about the statement in the letter from Kaiser Aluminum Co. which reads:

> The revised redraw rod price will make it possible to use aluminum in competition with copper in building wire in the electrical appliance market, in the electrical apparatus market and in the manufacture of such applications as magnet wire, transformer windings and communications cable.

Can it not compete with copper even without such a reduction in price?

Mr. MACFIE. We are not in the wire and cable business.

Mr. YATES. No.

Mr. MACFIE. So I do not feel that I could answer that question too well.

Mr. YATES. But from your experience, aluminum is offering competition more and more to copper in all fields, is it not?

Mr. MACFIE. That is true, but in the electrical field you have a lot of other factors you have to take into consideration, the amount of cross sectional area that you might have to use of aluminum as compared with copper, and these things tend to balance out some of the costs.

Mr. YATES. What about the hot metal contracts that Reynolds has? Do you foresee at any time that Revere will go into the business in this respect?

Mr. MACFIE. I will tell you, we are always openminded on any new prospect that means we can sell more metal, so if a hot-metal contract looked favorable to us at the time we would look at it very carefully.

Mr. YATES. Would you be in a position to furnish hot metal?

Mr. MACFIE. I think we could with our facility there at Ormet.

Mr. YATES. Do you contemplate using hot metal yourselves for your fabricating facilities?

Mr. MACFIE. No; we do not.

We have to take it in the cold form and ship it to our different divisions.

Mr. YATES. Mr. Sheehan.

Mr. SHEEHAN. Mr. Macfie, I notice in your statement that you and Olin, of course, control the Ormet Corp. Aren't you in turn a subsidiary of American Smelting & Refining Co.?

Mr. MACFIE. We are not a subsidiary of American Smelting & Refining Co.; no, sir. We are completely independent, but American Smelting & Refining Co. own about 35.8 percent of Revere's outstanding stock. That was acquired, I might say, by the merger of Revere in 1928. American Smelting & Refining Co. at that time owned two of the companies that went into the combined organization.

Mr. SHEEHAN. May I ask this question, then? In your estimation, does this percentage of the ownership of the stock give them pretty much control of your corporation?

Mr. MACFIE. It depends on what you would mean by "control," Mr. Sheehan.

I would say from the standpoint of management and operation they do not in any way interfere or direct how we should run our company.

It has been a very satisfactory relationship.

Mr. SHEEHAN. However, if they were not satisfied with your management as president of the company, this very large percentage of the stock would not be voted in favor your continuing as president, would it?

Mr. MACFIE. That is the risk you take.

Mr. SHEEHAN. The reason I ask this question is because it seems to me that you were talking about the possibilities of recommending legislation or other relief to protect you apparently from the foreign imports coming into the country.

Mr. MACFIE. Correct.

Mr. SHEEHAN. For a long time your company has used a tremendous amount of copper, and it is my understanding that the copper requirements, we only manufacture about one-third in our own country and we import about two-thirds from foreign countries, so hasn't your company been enjoying the benefits of a certain amount of cheap foreign labor in buying foreign copper, if you have ever bought any?

Mr. MACFIE. That is really a big piece of a question there all in one, but I can tell you this. I think the figures are not quite correct. I do not want to appear to correct your own statement there.

Mr. SHEEHAN. I am not sure of my figures. This information was given to me.

Mr. MACFIE. I think you would find that the production of copper in the United States would be more likely to be two-thirds of what is consumed here and only one-third is imported. It is reversed. We buy all our copper within the United States because the 2 major producers, Anaconda and Kennecott, are owners of these 2 Chilean operations, and they sell both domestic and foreign copper at the same price, so it is incidental to us where it comes from.

Mr. SHEEHAN. In other words, you may be buying all of your copper here in America, but still it might be a good proportion of it eventually is imported.

Mr. MACFIE. It could be intermingled; yes.

Mr. SHEEHAN. Because naturally all of us are quite interested in the tariff problems and in the problems of imports, although I think the Commerce Department furnished us some figures here the other day, if I remember, that the imports of aluminum have held about steady for the last 3 years, and that therefore we have heard several witnesses testify to the fact that they are running into a lot more or they feel they are running into a lot more competition from imports, but the figures apparently do not show that, and I was just wondering whether it is just a spotty thing.

Mr. MACFIE. No; I would suspect, Mr. Sheehan, that you will find what will happen in aluminum is what has happened already in the copper and brass industry.

Back in 1930 we were an export nation. We exported something like 90 million pounds, if I am guessing correctly. Today we are an import nation of copper- and brass-fabricated products, last year to almost 100 million pounds.

And what you find is this: Starting from 1949, the imports of fabricated copper and brass products was about 1½ percent of the total domestic industry, but as of January of this year it is 11 percent.

It has gradually increased, and it will continue to increase, because it is utterly impossible for our company to meet the competition of imported fabricated copper and brass products. They are running about 20 to 23 percent below our prices.

Mr. YATES. What is the labor factor in the costs that go into the manufacture of aluminum? I am told it is a very small proportion; is it not?

Mr. MACFIE. In aluminum?

Mr. YATES. Yes.

Mr. MACFIE. I contemplate this will happen in aluminum. You are talking in primary aluminum, your direct labor factor may be small, but in fabricated aluminum your direct labor factor is large.

Mr. YATES. But if you make your own primary metal, won't you be in a position to compete with imported?

Mr. MACFIE. You cannot. You have to start with this premise. The cost of primary aluminum today is 24 cents.

Mr. YATES. That wouldn't be the cost to you.

Mr. MACFIE. No; but it is the cost which we will put into our fabricating, because that is what we would have to pay if we had to buy it. We have got to get something on our investment in this Ormet Corp., so insofar as we are concerned at the fabricating level, we figure our costs at 24 cents. Now then, you can take an average price for products of aluminum, say 45 cents, so you have got about 21 cents of a fabricating cost over the price of prime aluminum. Now out of that 21 cents, we find that the foreigners are quoting somewhere between 5 to 10 cents per pound below us, and that comes out of that spread between the prime aluminum and the fabricated product price.

That is true on copper and brass.

Mr. SHEEHAN. In other words, I think, if I understand your answer to Mr. Yates, that your problem is not going to arise in the import of the prime metal, but your problem is going to be the competition from the fabricated materials that come into the country.

Mr. MACFIE. I think that will be more likely true, though we are subject, of course, to whatever prices that the Canadian Aluminum

Co. might choose to quote in this country, such as they did here recently when they dropped the price to 24 cents. They only represent 12 percent of the prime aluminum sales in this country, but they have still dictated the price for the rest of us.

Mr. SHEEHAN. Of course, Mr. Macfie, we have been wrestling with that thing for about 3 years that we have been holding these aluminum hearings.

Many times the point is made that there is monopoly in the industry when everyone has the same high price, but no one seems to give the industry credit when everybody goes down to meet a certain competitor, which is also the same picture in reverse, and that therefore if 1 company, as you say, only controls 12 percent of the production yet can force everybody else in the industry to come down to meet its price, apparently no one can control the entire price structure.

Mr. MACFIE. That is correct; that is very correct.

Mr. SHEEHAN. I noticed, and I must compliment you very much for your statement on page 9 where in the last sentence you say:

> We will take care of our customers' needs without requiring them to make long-term contractual or other commitments to us.

It seems to me this means that you are going to sell to anyone without a contract as they may want to buy whatever quantity they may want to buy. But won't that leave you in a rough position in case someone else reduces their price?

You might lose your customers in a hurry.

Mr. MACFIE. We have lost them already. That, I think, is the risk of selling that you have to take. We have never been in favor of long-term contracts. We have never bought copper on a long-term contract basis.

We do not sell copper and brass products on a long-term-contract basis.

We have done our business more or less within a short period, say within a 60- to 90-day cycle. And that is what we would expect to do in aluminum. If somebody wants to contract with us, we would certainly be willing to sit down and contract with them, but we are not going to require them to enter into long-term contracts.

Mr. SHEEHAN. I assume that is primary metal?

Mr. MACFIE. That is right.

Mr. SHEEHAN. Because the previous sentence was that the policy will be to sell primary metal.

Mr. MACFIE. That is correct.

Mr. SHEEHAN. That refers to the primary metal.

Mr. MACFIE. There are no contracts that I know of entered into for the fabricated products on a long-term basis.

Mr. SHEEHAN. Of course your company is in a position where with your agreement with Ormet you are going to have to take one-third of their production and get rid of it somehow; is that correct?

Mr. MACFIE. That is true.

Mr. SHEEHAN. I hope you are successful.

Mr. MACFIE. You don't wish it any more than I do.

Mr. YATES. I am interested in this deal you have with Ormet. There was a $450 million financing arrangement as I remember it, out of which you put up $150 million and they put up $3¼ million, is that correct?

Mr. MACFIE. No. The Ormet——

Mr. YATES. Or have I confused that?

Mr. MACFIE. You have confused that. Ormet is a $231 million program, of which $200 million was borrowed from banks and insurance companies and $31 million, the equity capital, was supplied by Olin and Revere in equal proportions.

Mr. YATES. And are both of you equally liable on the indebtedness?

Mr. MACFIE. That is the basis I think on which the loans were made, that they felt that both companies were sufficiently able to take out their proportionate share of the production. It is a take-or-pay deal. You have got to take it.

Mr. YATES. And the distribution of the benefits of the contract would go on the basis of the investment of each of the companies?

Mr. MACFIE. Because the costs are allocated, you see, to the 2 companies, so we get 34 percent of the costs and Olin would naturally absorb 66 percent because they take 66 percent of the production.

Mr. YATES. I want to return to this question of costs again.

You say that you are buying metal from Ormet at 24 cents, the published price.

Mr. MACFIE. No, I did not say from Ormet. I said we were buying metal from other producers. We will buy metal from Ormet at cost. Whatever the cost is at Ormet, we will take the metal at the full cost involved in the production of the metal.

Mr. YATES. I was under the impression that you were charging 24 cents.

Mr. MACFIE. No, that is our internal accounting as we handle it within Revere. We will charge our fabricating division with a 24 cents metal charge.

Mr. YATES. The price you pay Ormet from your fabricating division will be 24 cents.

Mr. MACFIE. No.

Mr. YATES. Don't you buy it from Ormet?

Mr. MACFIE. We buy it from Ormet at whatever the cost is to Ormet to produce the metal. It might be above 24 cents, it might be below.

Mr. YATES. I may be slow in following you on this. When you say "we," who do you mean by "we"?

Mr. MACFIE. I mean Revere and Olin.

Mr. YATES. Revere and Olin each buys it at cost.

Mr. MACFIE. That is right.

Mr. YATES. All right. Now who buys it at 24 cents, one of your divisions, your fabricating division?

Mr. MACFIE. Well, let me explain it so it will be a little clearer to you. The way we operate in Revere, we control all of our metal costs at what we call our general central office. That is where the accounting is.

Mr. YATES. Yes.

Mr. MACFIE. And to our fabricating division, like we have a fabricating division in Baltimore, we would charge them 24 cents for any aluminum that they might use for the fabrication of the product.

That just keeps them—we just want them to make money fabricating. That is the reason we do it. If we can.

Mr. YATES. And you want the other to make money.

Mr. MACFIE. That is right. We control the buying of copper and brass and aluminum and always have.

Mr. SHEEHAN. In other words, what you are trying to do is you do not want your fabricating division to have to take up the profits or pay the losses of any mistake or poor judgment in this other business operation.

Mr. MACFIE. That is correct, exactly.

Mr. YATES. Has your fabricating division been able to buy metal at less than the published price prior to your going into this with ORMET?

Mr. MACFIE. Not at any place I know of.

Mr. YATES. We had been informed that some of the companies which had long-term contracts were adhering to their contracts, selling primary metal at less than the price they paid, but buying scrap, very good scrap, at lower prices and using that as the basis for their manufacture and in that way, they had a lower cost.

Did your company do it?

Mr. MACFIE. No.

Mr. YATES. Were you aware of the fact that this was being done?

Mr. MACFIE. It has been reported to us but we haven't been particularly interested in finding it out or following it through because it didn't involve anything that we wanted to get into.

Mr. YATES. Do you propose to buy scrap?

Mr. MACFIE. We will buy some scrap, yes, as we need, but our requirements of scrap are very moderate, up to now, since we generate so much scrap in our fabricating operations, it is more than we need as a rule, so we do not have to go on the open market to buy scrap.

Mr. YATES. Do you require your customers to return scrap to you?

Mr. MACFIE. We don't require them. We would much rather they kept it, but they have a very bad habit of wanting us to take it back.

Mr. YATES. Is there any other copper company that has interest in a prime producer?

Mr. MACFIE. Would you repeat that?

Mr. YATES. Is there another basic copper company that has interest in the prime production of aluminum?

Mr. MACFIE. Anaconda.

Mr. YATES. Has an interest in—I meant in another producing company, another aluminum producing company. We are under the impression that Kennecott has an interest in Kaiser. Were you aware of that?

Mr. MACFIE. I think they have a stock ownership in Kaiser.

Mr. YATES. With Revere Copper?

Mr. MACFIE. In which way do you mean? I don't know what percentage of stock Kennecott owns in Kaiser. I think it is public record, but I don't know what it is.

Mr. YATES. Could you meet foreign competition if you go into the scrap market rather than the primary metal market?

Mr. MACFIE. I don't think so.

Mr. YATES. You can meet that competition better if you use virgin metal rather than scrap.

Mr. MACFIE. I don't think we can meet the competition either way, to be very frank with you, but I don't think the scrap market provides any medium by which you could compete, because there is only a certain amount of scrap you can afford to use anyway.

You have to be very careful how much scrap you do use in castings.

Mr. YATES. Can you meet the competition in the sale of primary metal?

Mr. MACFIE. That I hope we don't have to do. In other words, it is not our expectation to sell primary metal in any foreign market, if that is the question.

Mr. YATES. No. Suppose there are some who import the pig from foreign countries and bring it into this country at a lower price than $0.24?

Mr. MACFIE. That could happen. I don't know what we would do under those circumstances, because we have enough aluminum facing us that we are not interested in adding any more.

Mr. YATES. Mr. Macfie, we are grateful for your coming here and giving us the benefit of your knowledge and views and the history of your company and its problems.

We have benefited by it and we want to thank you again for coming down.

Mr. MACFIE. Thank you, I appreciate it very much having this chance to speak with you people.

Mr. YATES. The committee will stand in recess until May 6, when hearings will be conducted in room 217.

Thank you.

(Whereupon, at 11:20 a. m., the committee adjourned to reconvene on Tuesday, May 6, 1958.)

ALUMINUM INDUSTRY

TUESDAY, MAY 6, 1958

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON
MINERALS AND RAW MATERIALS OF THE
SELECT COMMITTEE TO CONDUCT A STUDY AND
INVESTIGATION OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10:20 a. m., in room 217, Old House Office Building, Hon. Sidney R. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding), and Sheehan.

Also present: Bryan H. Jacques, staff director; Irving Maness, counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The hearing will come to order.

The committee is privileged this morning to have with it the Honorable Gordon Gray, Director of the Office of Defense Mobilization. Mr. Gray, would you please come forward with your staff?

Give us the benefit of your views on the problems that face us. We are pleased that you took the time to come over here and to help us.

TESTIMONY OF GORDON GRAY, DIRECTOR, OFFICE OF DEFENSE MOBILIZATION

Mr. GRAY. I am glad to be here, Mr. Chairman, and gentlemen of the committee.

As the chairman has indicated, my name is Gordon Gray. I am Director of the Office of Defense Mobilization. With me is Mr. Charles H. Kendall, General Counsel of the Office of Defense Mobilization.

May I proceed with a prepared statement, Mr. Chairman?

Mr. YATES. You may.

Mr. GRAY. I appreciate this opportunity do discuss with you developments in the aluminum industry and their significance to small business.

The outstanding development in the industry during the last several years is the tremendous increase in its capacity to produce aluminum. Since the outbreak of the Korean war, production capacity has increased nearly a million tons and is still going up. To the large number of aluminum fabricators, most of them in the small-business category, this has meant a relatively assured source of raw material against which to plan their own operations.

One of the primary responsibilities of the Office of Defense Mobilization is to assure the availability of adequate supplies of strategic and

critical materials to meet the needs of national emergency. This entails determining the requirements of our Defense Establishment and of that essential portion of civilian industry which must be maintained under conditions of full mobilization. If a shortage of supply is shown, measures must be devised to meet the shortage. Among the alternatives are expanding the capacity of the producing industry or establishing a stockpile of the scarce materials. If these alternatives are not sufficient, reliance must be put on plans to restrict the use of, or encourage the substitution of other less critical materials in the event of mobilization.

The total supply of aluminum to American industry stems from domestic primary production, secondary metal, and imports. Secondary metal (both domestic and imported) averages about 22 percent and imports of primary metal about 13 percent of domestic primary production. Canada is the only country which has supplied the United States with metal during wartime. In peacetime imports from other countries have been nominal. The single year 1953 was exceptional. Because of heavy military demands the total domestic supply was inadequate to meet both military and civilian demand and caused total imports to reach the second highest tonnage on record. (The highest tonnage was in 1945 when Canada, the only foreign supplier in that year, liquidated its wartime contracts with the United States and shipped in 332,000 tons.) Even in 1953 total imports from all countries except Canada were only about 4 percent of the United States total supply. And there is attached, Mr. Chairman, a table showing the sources of the Nation's aluminum supply since 1940.

In 1940 total United States primary production was 206,000 tons of pig and ingot. The peak World War II production was achieved in 1943 with an output of 920,000 tons. This quantity was not again approached until 1952, when output amounted to 937,000 tons. By January 1, 1958, capacity had virtually doubled and reached 1,841,500 tons. Additional capacity planned by 1960 will raise the total to more than 2,600,000 tons, almost triple the 1952 level.

The shortage of aluminum during World War II and the demand arising from the military buildup accompanying the Korean war demonstrated the necessity for substantially expanding primary aluminum capacity. In 1950 domestic primary production was 719,000 tons. On March 31, 1952, an expansion goal was established for primary aluminum to increase the Nation's capacity to 1,546,000 tons per year by January 1, 1955. On October 1, 1952, this goal was revised upward to 1,746,000 tons by January 1, 1955. Certificates authorizing accelerated amortization over a 5-year period for tax purposes were issued under this goal for plants having a total estimated annual capacity of 777,000 tons. There is a table which enumerates these certifications. This increase, plus privately financed expansion projects undertaken without Government assistance, exceeded the goal, and the goal was closed on September 22, 1955.

As part of the expansion program there were offered in most instances purchase contracts which permitted the Government on the one hand to claim the total output of such facility for defense production or the stockpile. On the other hand the contracts required the Government to purchase any metal from the new plants which the company was unable to use or market in its normal operations. These

contract provisions ran for 5 to 6 years from the time the plants began production. They further provided that two-thirds of the expanded production, minus military set-asides and Government purchases, should be made available to nonintegrated consumers. The details of the administration of these contracts have been explored rather completely in earlier meetings with your committee. And there is a table attached, Mr. Chairman, which shows the current status of these contracts.

Under the contracts the Government ordered and purchased 493,668 tons for the national stockpile in the years 1953 through 1956. The Government was required to take 208,144 additional tons under the companies' options to "put" to the Government through 1957. In addition, the Government is still contingently liable for the purchase of 757,110 tons of aluminum under the outstanding contracts. And a table is attached reflecting that situation.

The minimum stockpile objective computed on the basis of a 5-year emergency has been exceeded. We are at present considering the recommendation of the Special Stockpile Advisory Committee that stockpile objectives should be revised to provide for only a 3-year emergency. If such a change is adopted the requirements for aluminim will be substantially reduced and inventories will exceed the maximum objective.

There has been one recent significant change in these contracts. The original contracts provided that after 5 years 25 percent of the expanded production was to be offered for sale to nonintegrated users for a period of 15 years. Last fall this requirement was increased to 35 percent by mutual agreement between companies which are in production and our delegate agency, the General Services Administration.

Shipments of aluminum mill shapes in 1957 by the nonintegrated producers amounted to 359,000 tons. The aluminum used for such production was acquired from the usual sources, that is, primary producers, secondary producers, and imports. The provision of the Government purchase contracts that a portion of the assisted expansion be offered for sale for a period of 15 years following the termination of the direct Government purchase obligation would alone supply about 228,000 tons or almost two-thirds of the 1957 consumption by this group of nonintegrated producers.

While striving for an adequate defense position, the Government has consistently sought to develop competition in the production of primary aluminum and to encourage the entrance of new producers. With the end of World War II the disposal of Government-owned facilities for the production of aluminum was undertaken by the Surplus Property Board. Planning favored the creation of strong competitors for the original sole producer in the United States. Two such integrated competitors were established in the course of the surplus disposal program, that is, Reynolds and Kaiser.

Under the expansion goal during Korea all increases in production were welcomed and new producers were given every encouragement possible under existing laws. It is noted that each new producer of aluminum metal began its production because it wanted metal or its own fabrication into products. Each new producer has hitherto had a surplus of raw metal which it has made available to other con-

sumers of the raw metal as long as the supply lasted or, as at present, as long as the demand would utilize it.

Three new producers of primary metal are being established (in addition to expansion by the three previous producers). Each of these companies represented established fabricators of nonferrous metals (including aluminum), and therefore is assured of its own firm market for its own raw metal. Only one of these new producers has a Government purchase contract and that's the Harvey Co.

It is believed that the aluminum expansion program has greatly improved the supply of metal available to small-business users. This is generally illustrated by the accompanying table showing shipments of aluminum mill shapes by integrated and nonintegrated producers over the past 7 years. While it is not proper to consider all nonintegrated fabricators as small business, a substantial portion is in the small-business classification. The table shows that in 4 or 5 major categories of mill shapes the nonintegrated producers have bettered their share of the market in a rather substantial degree. Only in the case of foil have the nonintegrated producers failed to improve their relative positions.

The capacity which now exists and which is being brought in by the industry will contribute to filling the growing metal requirements of business concerns. While a large proportion of this capacity was encouraged and assisted by the Government, it should be noted that over the next 3 or 4 years the industry is planning further extensive additions to their facilities which will again increase the supply of aluminum for all consumers, including those in the small-business classification.

That is the completion of my prepared statement, Mr. Chairman.

Mr. YATES. Thank you very much, Mr. Gray, for an excellent statement.

Under the statutory authority of ODM, does it have a mandate or requirement to protect or to foster the interest of small business?

Mr. GRAY. The Defense Production Act, Mr. Chairman, requires that the ODM have an interest in the encouragement of small business—that is, title 7, section 701, which expresses the sense of Congress that small-business enterprises be encouraged to make the greatest possible contribution toward achieving the objectives of the act. Then there are various provisions which seek to make it possible for small business to participate in accordance with that wish.

Mr. YATES. How does ODM fulfill that mandate?

Mr. GRAY. Well, there was a particular section in the bill, section 701 (d), which directed the Office of Defense Mobilization to investigate the distribution of defense contracts with reference to the share of such contracts which was going or had gone to small business, and to make a report to the President and Congress not later than 6 months after the enactment of this act or the amendments of 1955. It specified what should be in the report. It is my information that the study and report were made in accordance with the provisions of the act.

Mr. YATES. I don't know that is quite an answer. Can you give us examples of how ODM has helped small business in the course of its lifetime? We do know you have these incentive contracts and the tax amortization certificates that have been approved, but I think big business has been the beneficiary of those to the greatest extent.

I wonder whether there have been any types of benefits that have accrued to small business through ODM. I recognize you have not been Administrator for a particularly long period of time but I wonder whether your memory serves you, or whether counsel on the committee, can recall instances where ODM action has resulted in significant advantage to small business.

Mr. GRAY. I think in reference to the rapid amortization program, it is probably true, Mr. Chairman, that small business did not get the major share of these certifications during the history of the program. This is certainly in part due to the factors which inhere in the situation. There certainly was no bar against small business, but I think by and large small business did not seek or did not find itself in a position to seek the certifications.

Mr. KENDALL. The substantial capital involved in most of these expansions did tend to limit, of course, the applicants.

Mr. GRAY. I don't think it can be said there weren't certifications to small-business concerns.

Mr. YATES. Have you had occasion to break down your statistics covering the issuance of your certificates of amortization which would indicate what portion of them were given to small business and which went to big business?

Mr. KENDALL. Yes; we have done that. Of course, you will appreciate very well the difficulty of deciding what is a small business across the board of a number of different industries, and it varies necessarily from one type of industry to another. But we have made a breakdown showing percentages of certificates to small business and we could provide the committee with that.

Mr. YATES. Has that been made public?

Mr. KENDALL. I believe it was made public. I am sure we could provide the committee with it.

Mr. YATES. I would be grateful if you would do so.

(The document referred to is as follows:)

BREAKDOWN SHOWING PERCENTAGES OF CERTIFICATES TO SMALL BUSINESS

From the beginning of the accelerated amortization program in 1950 to date, the number of certificates of necessity issued and outstanding amounted to 22,010. The estimated cost of the facilities certified amounted to $38.2 billion, of which $23.1 billion were eligible for accelerated amortization.

Included in the above, applicants classified as "small business" were issued 8,121 certificates estimated to cost a total of $4.6 billion, which represents approximately 41 percent in number and 12 percent in dollar amount.

Applications for necessity certificates are classified "small business" based upon the number of workers employed by the applicant and its affiliates. Any manufacturing concern is classified as small if it employs 250 or fewer employees (provided it is "not dominant in its field of operations"); as large if it employes more than 1,000 employees; either small or large, depending on its industry and in accordance with the employment size standards set forth by the Small Business Administration, if it employs more than 250 but not more than 1,000 employees.

Certificates issued to applicants classified as "small business" in the light manufacturing field were given 5 additional percentage points over the normal percentage pattern.

Mr. YATES. Do you remember what the definition is of "small business" with that you used for purposes of breakdown?

Mr. KENDALL. I think it varied from industry to industry. I believe there was a general type of definition such as "independently owned and operated," and "not dominant in the industry." That sort of thing. Now, there probably also were some employment

limits, not over 500 employees, also. But the listing, if it does not show the way small business is defined, can be supplemented by an indication from us as to how we arrived at the definition.

Mr. YATES. Were there any small businesses that received any of the incentive-type contracts, that went to big business, to persuade them to expand?

Mr. GRAY. Well, Mr. Chairman, again here you get into definitions or comparative kinds of definitions.

Mr. YATES. You mean small business?

Mr. GRAY. Yes. I mean to say, it is pretty hard, I suppose, in production of metals, to have an effective economical producer which would meet the tests of small business in some other fields of endeavor. This is why I would say comparatively, but as an example, I suppose comparatively the Harvey Co. is small business if you relate it to the other larger companies. But by certain tests I would suppose the Harvey Co. would not meet the standards which you apply to small business in some other kind of industry. By and large these expansion contracts, I think, generally speaking, were entered into by large producers.

Mr. YATES. You suggest on page 1 of your statement that—

> if a shortage of supply is shown, measures must be devised to meet the shortage. Among the alternatives are: Expanding the capacity of the producing industry or establishing a stockpile of the scarce materials.

What devices do you use for that purpose? Obviously the certificates of amortization were one device. Incentive type of contracts was another device. Were there other forms of incentives that were used to persuade expansion of industry to meet your goal?

Mr. GRAY. I think there were some guaranteed loans also in the expansion program, Mr. Chairman.

Mr. YATES. Were there just these three types of devices used to carry out the program?

Mr. KENDALL. Expansion, of course, sir, can be accomplished by the Government producing the item. The one example that comes to mind is the Nicaro plant in Cuba that is Government owned and was itself expanded.

Mr. YATES. Yes, Government-owned.

Mr. KENDALL. There are probably others that simply don't come to my mind at the moment, but the major ones were procurement contracts, loans, loan guaranties, and the tax amortization device.

Mr. YATES. Do you have statistics which would indicate a breakdown of the use of other devices that were allocated between big business and small business, as you do have certificates of amortization?

Mr. KENDALL. I don't know Mr. Chairman, of any attempt to break down the contracts in that fashion. Of course there wasn't an allocation. You used the expression "allocation." There was not an allocation of a portion of expansion to large business and to small business. The essential purpose was to produce expansion with as much regard as the circumstances allowed for encouraging small business to take part in the expansion.

Mr. YATES. You suggested that Harvey was a small business by comparison to other producers in the aluminum field, as one example of how a business broke into the aluminum expansion field through the use of some of the incentive devices of ODM. Perhaps I used

the word "allocate" wrongly there, used to show the division between small and big business in the grants of these various incentives.

Mr. KENDALL. I think that a review of the programs might disclose several examples. If you would like us to run through, I can give you a statement on things like expansion on copper production and other expansions with individual mines, that were involved. I am sure there will be many examples of relatively small business being able to assist themselves through the expansion programs.

Mr. YATES. I think I am pressing the question a little. The first question I asked was how ODM carried out its mandate. I am trying to get examples and get you to expand how you carry out this mandate. I don't know what else you have done to carry out this mandate. I gather the impression from my experience with this committee, that many big businesses benefited from the devices that were used by ODM. I don't know that small business benefited particularly. I think possibly that the contracts that were entered into with the aluminum companies, for example, and which required certain portions of the new production to go to small business—or rather to nonintegrated users—and it was intended that those go to small business and yet under definitions of nonintegrated users that have been presented before this committee, it would be difficult to classify certain of those nonintegrated users as small business. For example, General Motors, or Ford, and some of the others. Now in this whole picture, of course, it is the purpose of this committee to attempt to find out how small business can stay alive and what seems to be an increasing concentration of production facilities in fewer and fewer large companies. I wonder whether ODM can help us with this?

Mr. KENDALL. I think what the chairman said about increased concentration would be very important to the future of small business, but I think on that score there has been some defense contribution through the expansion program to spreading production, to increasing the number of competitors in basic production. Although the new competitors might not be themselves small business, the more there are of them, the better off small business is.

Mr. YATES. We agreed to the value of increased competition.

Nevertheless, we wonder what the mortality rate of small business will be in the future. We are in a period of abundance today. All the producers have indicated that they anticipate that this period of abundance—they hope at any rate, and we hope with them—that this oversupply of aluminum will gradually be eaten up, and we will be getting more and more prosperous again. Then the question comes to mind, where will small business fit into that? We no longer have our protective paragraph in these contracts. But given the minimum protection that they did to small business under the terms of integrated and nonintegrated user, I know from the statement there have been amendments to the incentive contracts with the large aluminum companies so I forget what the figure is now——

Mr. KENDALL (interposing). 35 percent rather than 25 percent.

Mr. YATES. That is correct.

Now, what will the definition of a nonintegrated producer who has the benefits of that paragraph be. Will it still be General Motors and will it still be Ford? Will it still be the largest companies in the

country which are not producers in themselves? Is this something I should ask GSA rather than ODM?

Mr. KENDALL. Yes; it is as a matter of fact.

Mr. YATES. I will ask whether this was ODM's intention? After all, you had a mandate under the law to protect small business. You pass that mandate along to GSA, do you not? You are GSA's boss. How far do you go in your mandate to GSA? Do you tell them, "This is our need, will you go out and accomplish this need for us?" Or do you tell them how to do it?

Mr. KENDALL. The essential is what you have stated. "This is our need." They use, however—there is an indication in the program as to the measures, the statutory means, that shall be used, that are available. That is you would recite with or without the use of loans, expansion contracts, etc.

Mr. YATES. But in your mandate to GSA, you did not tell them to protect small business or to fashion the contracts in any particular form?

Mr. KENDALL. Well, I wouldn't want to speak for all the certificates over the last 8 years, sir, but I think there are some in which strong indication of needed new competition, the desirability of smaller producers, would be found; although I really can't say. It goes back over too many years and too many certificates.

Mr. YATES. I know in here that you have come to the conclusion that you wanted a 3-year supply of aluminum rather than a 5-year supply. As I remember the testimony of GSA before the Appropriations Committee, of which I am a member, I thought you met your aluminum goals. Am I correct in that, Mr. Gray?

Mr. GRAY. No, we have met the minimum goal. Under a 3-year program we will have met the maximum goal, as well.

Mr. YATES. Have you not yet attained your maximum goals for aluminum?

Mr. GRAY. Not under the old definitions, I believe, but in the new definitions which we are working on at the present time, it would appear probable that a maximum objective will have been met by the material we have on hand, and on order. To state it differently, I foresee no new procurement of aluminum for these strategic and critical stockpiles. I think that is the import of your question.

Mr. YATES. Do you foresee additional need for incentives for the aluminum industry?

Mr. GRAY. I think we see nothing now which points to the necessity for incentives for further expansion.

Mr. YATES. Can you tell us when your minimum and maximum goals were met?

Mr. GRAY. Not offhand. Mr. Chairman. As far as the minimum goal is concerned, it has probably been a couple of years but I would like the privilege of supplying a more precise answer to you for the record, if you wish it.

(The information requested is as follows:)

The approximate date when the minimum aluminum stockpile goal was reached was December 31, 1955.

Mr. YATES. I wondered why the incentives were given to Harvey at the time they were. I thought you had attained your minimum goal at the time you entered into that contract.

Mr. GRAY. We are talking about two different kinds of goals, now, Mr. Chairman. There was an expansion goal established for the aluminum industry as a whole, and at the time the Harvey contract was entered into, the expansion goal had not been filled.

Mr. YATES. I see.

Mr. GRAY. And in the meantime it has been.

Mr. YATES. Does ODM take any position with respect to interpreting the contracts that have been entered into by GSA or does it leave this to GSA and to GAO, and to the lawyers that are involved?

Mr. KENDALL. The interpretation, as you say, would be first in the hands of the administrative agency—that is the contracting authority—and then the General Accounting Office, and the Attorney General.

Mr. YATES. Do you have to approve the contracts?

Mr. KENDALL. No. Strictly speaking, it has never been necessary for ODM to approve the contracts. I think in almost every case ODM knew the contract that was being entered into before it was signed, but there is no formal requirement that ODM approve the contract.

Mr. YATES. How do you know, then, whether or not the contracts will meet the requirements?

Mr. KENDALL. That is the responsibility of the Administrator of General Services, who is given by the President the job of making these contracts.

Mr. YATES. And of using the forms of devices and incentives, which are those established by ODM for the particular contracts.

Mr. KENDALL. The authority under the Defense Production Act to make these contracts is delegated directly to the General Service Administrator. The limitation on his activity is that he can undertake them only within programs certificated by the Office of Defense Mobilization.

Mr. YATES. In fact, you tell them what to do, don't you? I remember the Nicaro contract about which Mr. Floete testified before our Appropriations Committee, where he indicated that he wanted to enter into a guaranteed-loan type of nickel program with the Bethlehem Steel Co. and ODM refused to approve this form of contract and required another type of contract, another type of incentive contract, be entered into. Now, how does this jibe with your answer? My facts are correct, aren't they?

Mr. KENDALL. I don't think your description of Mr. Floete's position is quite accurate.

Mr. YATES. He testified before our committee that he did want to enter into the contract with Bethlehem Steel Co. under a guaranteed-loan type of provision which, he said, would be the most economical type. He said, however, when he approached ODM on this it was suggested to him that it would be better if an incentive-production type of contract were entered into. Now, are my facts correct?

Mr. KENDALL. I think, if I may restate the position of Mr. Floete——

Mr. YATES (interposing). I will just show you the hearings.

Mr. KENDALL. Well, I think his reason for coming back to ask whether the program could be expanded to include loans and loan guaranties as a measure for expansion, his purpose was to have the opportunity to deal with additional outfits that didn't want to go

ahead on any basis except a loan. I don't think it is accurate to say that he would have preferred to make a contract with Bethlehem, or Bethlehem's subordinate affiliate, in this case. The program as given him by ODM did not include authority to make loans or loan guaranties. His return, then, was for the purpose of determining whether the program could be enlarged to include loans and loan guaranties, and the Director of ODM decided not to include them. The Bethlehem Co., or its affiliate, did make, I believe, a proposition based on purchase guaranty, subsequently.

Mr. YATES. At a price which was higher than the Freeport Sulphur Co.?

Mr. KENDALL. That is right.

Mr. YATES. I don't know whether you have read Mr. Floete's testimony before our Appropriation Subcommittee. I suggest that you do read it. You will find this was the type of contract he thought was much more economical. I wondered why ODM had required him to use another type of incentive rather than the one he suggested, in view, particularly, of what I interpreted your answer today to be, that ODM tells him nothing in terms of how to proceed but just tells him, "This is our need."

Mr. KENDALL. I did comment, Mr. Chairman, that the program frequently included the types of authority that might be used.

Mr. YATES. Mr. Gray, have you had occasion to review in your mind, or come to any conclusion, as to whether incentive-type contracts have been beneficial to the Government?

Mr. GRAY. Well, I think that it is pretty clear, Mr. Chairman, that, given the validity of the desire to have expanded production in these various types of materials (and I believe that expanded production was important), I think this program has been quite successful, particularly in the field of the metal which we are discussing here this morning. It has been a rather startling expansion, I think, in a short period of time, so that I think it has been good.

Mr. YATES. Would you venture an opinion as to whether small business has been placed in a more precarious position because of contracts of this type strengthening big business and permitting them to expand and thereby giving them competitive advantages which small business did not enjoy?

Mr. GRAY. Well, I would think that small business, generally, and those users of this metal who are in the category of small business, have been benefited by the program. It has, as you say, also given incentives to large producers of aluminum, but it is really pretty hard, it seems to me, to think of a small-business producer of aluminum by the very nature of the operations involved in the process. But I think the expansion of the supply, plus the development of competition in the producing industry, is necessarily a benefit to small business.

Mr. YATES. Does ODM's responsibility, in determining the requirements of the Defense Establishment and the essential needs of civilian industry which must be maintained under conditions of full mobilization, carry with it the requirement to consider the exclusion of imports of certain metals? Do you go into the import question at all?

Mr. GRAY. I really am not sure I understand the question, but, as far as requirements are concerned, I think the answer is "No"; that imports would not ordinarily be involved. When a calculation is made as to supply sources, of course, imports would be. I am not sure that is responsive, because I didn't quite understand the question.

Mr. YATES. The reason why I asked that question is, there has been testimony before this committee by Mr. Macfie, president of Revere Copper & Brass, Inc., that both the copper and aluminum imports are hurting American business. I wondered whether or not ODM has any responsibility to consider this problem.

Mr. GRAY. I think perhaps I understand the question. Under section 7 of the Trade Agreements Extension Act, there is a provision to the effect that, whenever the Director of the Office of Defense Mobilization has reason to believe that the level of imports of any articles has reached the point where they threaten to impair the national security, then he has an obligation, having so found, to make a certification to the President. In such an event, then the statute directs that the President cause an immediate investigation to be made and, if he agrees, as a result of his investigation, with the conclusions of the Director of ODM, and finds that the level of imports does, indeed, threaten to impair the national security, he shall take such action as he deems necessary. I think that is the language of the statute.

So, the Director of ODM does have a specific statutory responsibility with respect to imports, and there have been a good many cases which have been dealt with by the Director of ODM under section 7. Up until this time, there has been, actually, only one certification, which had to do with imports of crude oil, but many other kinds of imports have been considered by the Director of ODM. So that the effect on national security of imports is a matter which we take into account under the statutory admonition of section 7.

Mr. Yates. How does this work out with respect to the Tariff Commission? They have a peril point that they have to administer, too. Apparently, you have a peril point.

Mr. GRAY. Well, I don't think it is quite accurate to refer to peril points under the national-security provision of section 7. Of course, the Tariff Commission, in administering the escape-clause provision of that act, is concerned with injury to the domestic industry and does not have, as a factor in its consideration, a statutory basis for considering the national security. This part of the act is administered on the grounds of injury to the domestic industry.

Mr. YATES. There could be an overlapping, however, could there not?

Mr. GRAY. There could be; yes.

Mr. YATES. Some of the industries which you thought were necessary to national defense might, possibly, be impaired?

Mr. GRAY. It is possible under that act for an industry which feels itself aggrieved by this import situation to seek relief, either under the escape clause or section 7. There would be some cases which probably could come under both of these provisions.

Mr. YATES. Does the aluminum industry fit that category as being an industry essential to national defense?

Mr. GRAY. Oh, I think the aluminum industry certainly is essential to national defense, but I don't know of any suggestion that the import situation is affecting it to the point of endangering its stability.

Mr. YATES. I take it then that ODM does not look into the matter of imports endangering the industry.

Mr. GRAY. I don't think there has been any serious consideration of that, Mr. Chairman.

Mr. YATES. Was ODM consulted before the aluminum contracts were renegotiated recently and the revisions made under which the imports that were purchased by the producers having contracts with the Federal Government were deducted from their tender rights from the Government?

Mr. GRAY. Yes, Mr. Floete talked with us several times about this.

Mr. YATES. Did you issue a directive in terms of revising such contracts or was this just an informal consultation.

Mr. GRAY. This would not be, I think, within the precise responsibility of ODM, but we have very close relationships with Mr. Floete, of course. We did counsel with him about that.

Mr. YATES. Then, you neither approved or disapproved those changes. Is that within your province to approve or disapprove those changes?

Mr. GRAY. It is not within our official province. I think it is fair to say that in my own consultations with Mr. Floete, we agreed with what he was trying to do.

Mr. YATES. Did you have occasion to consider the effect of purposes of scrap by the primary producers upon their tender rights?

Mr. GRAY. I am reminded by Mr. Kendall that in the same way as we discussed the negotiations which he did enter into, there were discussions about the effect of scrap. Indeed, I think we talked about, certainly on some occasions, the whole package of imports, scrap and their effect on the companies' relationships with the Government so that the answer to the question is, Mr. Floete did discuss it with us. Again, however, it would not be precisely within our responsibility to direct him to do anything about it.

Mr. YATES. You indicated you were in agreement with him on changes in the contracts to reflect the decrease in tender rights. I wonder whether you suggested to him there should be a decrease in the tender rights predicated upon the scrap purchases of the companies too?

Mr. GRAY. Well, let me answer your question this way, Mr. Chairman. We, along with everybody else concerned and interested, are not too happy when we find ourselves in the situation of having to spend the taxpayer's dollar for metals for which the Government does not have a demonstrable need. What I am trying to say is that it developed that many of these producers took advantage of their right to put metal to the Government. Of course, we must honor our contracts. We have had many discussions on various occasions about the possibility of reducing the Government's obligation, which, of course, must be done entirely by negotiation inasmuch as the Government cannot walk off and leave a contract. We counseled with Mr. Floete about the general desirability of reducing the obligation but as far as the negotiations with the companies are concerned, this is his responsibility and he must conduct them without interference from our office.

Mr. YATES. The agreement of ODM as to what he does is of no significance with respect to the revisions of the contract then, is that the import of your answer?

Mr. GRAY. Well, I think of no legal significance. I suppose, to be perfectly candid, that Mr. Floete is interested in what the judgment of the Director of ODM would be.

Mr. YATES. I would think so. I get the impression from my other hearings from the Appropriations Committee that Mr. Floete is over at your office very frequently.

Mr. GRAY. We have close and constant contacts.

Mr. YATES. Do you have any opinion about whether or not the purchase of scrap by the producers should be deducted from the contracts?

Mr. GRAY. I would only say, Mr. Chairman, that I think it is perfectly appropriate for Mr. Floete, in his negotiations, to discuss any basis at all on which he might persuade the companies to make a reduction in their rights to "put" to the Government. This would have to be, I think, under the contracts then a matter of agreement between the Administrator and the company concerned.

Mr. YATES. There has been a discussion in the newspapers of the so-called Seaton plan. I think it is called the mineral stabilization plan. Was that issued in consultation with ODM? The committee has been told more and more competition exists between copper and aluminum. The plan covers copper, lead, zinc, and ferrous bar and tungsten. Presumably there will be certain incentives offered under the plan which might bear upon the competitive position of aluminum as against copper, and I wondered whether or not ODM was consulted?

Mr. GRAY. We were not involved in the development of that program, the reason being, Mr. Chairman, that this is a program which is advanced in the interest of domestic industry and not developed for purposes of defense or defense mobilization. In other words, these materials which are involved in that program are not ones with respect to which we have any further concern from a defense point of view, taking into account our stockpiles and productive capacity. So that this program is one conceived and designed in support of the economy in this particular area, and not as a mobilization measure.

Mr. YATES. Mr. Gray, you testified that the question of existing capacity is of significant consideration to ODM. If because of Government incentives to the copper industry, the aluminum industry must cut back existing production or cut back on their plans to expand, it does have some significance to ODM, does it not?

Mr. GRAY. Well, if any program or any development adversely affected an important and vital productive capacity we would, of course, be interested. I was only responding to the question as to whether we participated in the development of the program. Now I will have to say, Mr. Chairman, I have not seen the legislation which I understand is coming and which I am told will spell out in more detail the Interior proposal to the Congress. But I certainly would suppose that there was no intent in that to injure any industry, such as the aluminum industry and I would have to make a guess that it would not be so designed as to affect the aluminum industry to the point that we would be concerned from the mobilization base point of view

Mr. YATES. Frankly, I am somewhat surprised that ODM was not consulted with respect to the plan, because all metals are of basic importance to the security of our country. The capacity to produce such metals certainly is. Therefore, where a plan of this type seeks to sustain certain metals industries, and where the plan may have a significant effect on the production of other metals, I would think

ODM would he consulted. Perhaps you will be when the legislation is sent up to the Congress.

Mr. GRAY. Yes.

Mr. YATES. Could you tell us why Revere and Anaconda were denied tax-amortization certificates at the same time Harvey was granted one? You were not in office then.

Mr. GRAY. I was not perhaps——

Mr. KENDALL (interposing). I was not under the impression that Anaconda was denied a certificate.

Mr. YATES. I was under the impression it was denied a certificate.

Mr. KENDALL. I will have to go back and find out.

Mr. YATES. O. K. The committee stands in recess for a few minutes.

(At this time Mr. Kendall consulted with other people in the room.)

Mr. KENDALL. My information is that they were both given tax-amortization certificates, Mr. Chairman.

Mr. YATES. Revere?

Mr. KENDALL. That is my information.

Mr. YATES. I have a statement by Mr. Macfie before this committee, on May 1, in which he states that on October 12 ODM denied Revere's application on the ground there was no present or prospective shortage in capacity for a certificate of amortization in connection with its intention to expand its primary aluminum production.

Mr. KENDALL. October what year?

Mr. YATES. October 12, 1955.

Mr. KENDALL. We will have to check that. I have before me an indication that the facilities in the amount of $108 million were certificated for Ormet, which is Olin Mathieson, Revere.

Mr. YATES. That was Olin Mathieson and I think Olin had one and Revere bought into the company.

Mr. KENDALL. It is a single plant, sir.

Mr. YATES. Yes, but Olin had proceeded with this expansion program, as I understand it, and Olin had received the certificate at that time. According to the testimony before us, Revere made this deal to combine with Ormet but Revere itself was never granted a certificate.

Mr. KENDALL. But did apply for one?

Mr. YATES. Yes.

(The document referred to is as follows:)

APPLICATION FOR NECESSITY CERTIFICATE FILED ON AUGUST 2, 1955

Revere Copper & Brass Inc., filed an application for a necessity certificate on August 2, 1955, covering facilities for the production of 120,000 tons of alumina and 60,000 tons of aluminum pig per year. The estimated cost of the project was $52,776,800, and the proposed location near Wenatchee, Wash.

The application was denied certification on October 12, 1955, for the reason that it was determined that there was no existing or prospective shortage of facilities to produce either alumina or aluminum in the interest of national defense. The expansion goal for aluminum was formally closed on September 22, 1955.

There was no tax amortization certificate issued to the Harvey Aluminum Co. in 1955.

Mr. KENDALL. I will have to check that.

Mr. YATES. Off the record.

(At this time there was off-the-record discussion.)

Mr. YATES. Harvey's certificate was issued about that time.

Mr. KENDALL. Harvey's certificate was issued about 1952, I believe.

Mr. YATES. Wasn't that ahead of Anaconda?

Mr. KENDALL. That would be before 1952, perhaps 1950, on the one that went to Anaconda. The certificate covering The Dalles operation was issued in the latter part of 1952.

Mr. YATES. Was there no certificate issued in 1955 to Harvey? Or was that an incentive contract?

Mr. KENDALL. Yes.

Mr. YATES. Was there not a certificate granted to it in that year, as well?

Mr. KENDALL. I don't think so. There may be an extension of the preexisting certificate.

Mr. YATES. Can you check that?

On page 2 of your statement, Mr. Gray, certain figures are given as to the additional capacity planned for the aluminum industry. Does this take into consideration the cutbacks that have been announced?

Mr. GRAY. I will have to get some help on that, Mr. Chairman. No, it does not take any cutbacks into account.

Mr. YATES. These were just the announcements that have been made from time to time as to what the proposed expansion is. Subsequent announcements for cutbacks have not been reflected in these figures?

Mr. GRAY. I believe not, sir.

Mr. YATES. Does ODM take a position with respect to whether or not hot metal of the type which is furnished by Reynolds to General Motors and to Ford, both of whom fall within the definition of nonintegrated producers, according to the testimony before this committee, can be used as the basis for the computation of the amount that is allocable to nonintegrated producers under those contracts? Do I make myself clear? General Motors and Ford are now buying hot metal from Reynolds in new plants. The contracts provide for certain amount of metal under the new capacity plants to go to nonintegrated producers. Does ODM take a position as to whether or not this metal comes within that formula or is this something that General Services Administration will have to work out for itself?

Mr. GRAY. I think this is a GSA responsibility, Mr. Chairman.

Mr. YATES. And ODM takes no position on this?

Mr. GRAY. I have not been involved in that, no, sir.

Mr. YATES. At the bottom of page 5, it is indicated that your table 6 shows shipments of aluminum mill shapes by integrated and nonintegrated producers over the past 7 years. The statement then shows a substantial portion is in the small-business classification; Do you know what portion would be in the small-business classification in connection with the table on page 6?

Mr. GARY. I understand the question. I don't think I know the answer to it, though, Mr. Chairman. I don't know whether I can supply that or not. I would be glad to make a try at getting this information if you would like it.

Mr. YATES. I wondered how you concluded that a substantial portion is in small-business classification without knowing the breakdown.

Mr. KENDALL. Mr. Chairman, there is a distinction, I believe, between the statement that the Director made concerning nonintegrated fabricators and the table which has to do with nonintegrated

producers of foil sheet and plate, and so on. "Nonintegrated fabricators," of course, includes a much larger group of companies, a great many of which are small business, than does the classification "nonintegrated producers." Do you follow me?

Mr. YATES. Yes.

Mr. KENDALL. I understand there are some 17,000 fabricators of aluminum.

Mr. YATES. Where do you get those figures? Where did you get that figure of 17,000?

Mr. KENDALL. It was provided by the Business and Defense Service Administration of the Department of Commerce some time ago and today it may not be accurate, but I think it would probably be larger today than it was when I got it.

Mr. YATES. Can you furnish for the record a breakdown of that figure? I am sure you can if you got it from GSA. They must have a breakdown.

(The information requested is as follows:)

DEPARTMENT OF COMMERCE REPORT ON NONINTEGRATED COMPANIES

On the basis of the records and information available to the Aluminum and Magnesium Division, BDSA, it is calculated that of the nonintegrated companies reporting shipments covered in the table, about 83 percent employ less than 500 employees. Included in the 17 percent with over 500 employees are some small companies which are now subsidiaries of larger companies.

Almost half of the companies listed as employing over 500 employees are in the category of wire and cable producers. As can be seen from the table, this category accounted for a relatively small percentage of total shipments of nonintegrated producers. Producers of extruded shapes and drawn tube account for the greater part of nonintegrated shipments and also use relatively more primary metal in their operations than is the case in the other categories, and in this category the percentage of companies with under 500 employees is substantially higher than the overall figure of 83 percent.

Mr. SHEEHAN. Mr. Gray, I note your comments that you think the Department might change its viewpoint from a stockpile objective of 5 years to a 3-year emergency. It is my understanding that the greatest demand for aluminum has been for need in the manufacture of airplanes and with our tendency now to go to missiles, it looks like in the future there will be less need for the large amount of airplanes originally envisioned in a defense effort. Could that be 1 of the reasons for cutting back to a 3-year supply rather than a 5-year?

Mr. GRAY. Not precisely any change from aircraft to missiles, but more the thinking about the probable nature and extent of any new conflict which we might get into. Of course, no one can precisely predict what kind of a war we would have to fight in the future, but I don't think I know anyone any more who believes it is going to be a 5-year World War II type of conflict and the early planning, much of it as was done in the Korean crisis, for example, contemplated the kind of mobilization we have been accustomed to. That is the buildup of great productive capacity supplemented by the stockpiles of these various strategic materials. In World Wars I and II, and the Korean war, we went through this mobilization process without any very serious threat of attack on this country. In the new kind of age we are living in, we no longer, of course, have any satisfactory immunity against attack and it now doesn't seem wise to plan for a long period of mobilization and buildup, expecting to use large stockpiles of critical and strategic materials. The result is that we have substan-

tially completed the stockpiling of this kind of material. Indeed, we have excesses to our needs in some of these categories, but this has come about by the new strategic concept.

Mr. SHEEHAN. Has the Department of Defense Mobilization made any final decision or judgment as to whether or not the aluminum stockpile at the present time is excessive or just enough?

Mr. GRAY. Well, as I think I indicated in my prepared statement, we have been working on the new statement of stockpile policy which I hope to have out soon. My guess is that under the revised criteria and procedures, rules, we will find that we have under any of our goals more than an adequate supply of aluminum. I do not think we will be again in the business of procuring aluminum for the critical and strategic stockpile.

Mr. SHEEHAN. Well then, assuming, as you indicate might happen, you do then have more than an adequate supply of aluminum, you are going to be faced with some problems. No. 1, if you have an excess supply you are going to either have to dispose of it or sit with it. No. 2, you are going to be faced with the contracts you already have or the set-asides will give you more aluminum and then your Department, it seems to me, has to make a judgment whether you want to get rid of the excess supplies, whether you want to surplus warehouse it, or whether you want to export it or get rid of it. Do you have any ideas what is going to happen?

Mr. GRAY. I do not at this time know what is going to happen, except I do know at this time we are not thinking of disposing of any of these metals on the open market when the metal markets are not in good shape. I think we would never seek to dispose of any of these stockpile materials when they would disrupt our economic processes. As far as disposition is concerned, you will recall that very elaborate safeguards are placed on disposition by the Stockpiling Act itself, requiring notice to the Congress for a period of time, and things of that sort. I agree that some day we are going to be faced with the problem in these excess categories and I don't know how to solve it, except that I know we don't try to solve it at a time like this. That is by disposition, we don't.

Mr. SHEEHAN. Of course, your Office of Defense Mobilization may have to review the entire stockpile situation with reference to aluminum. As I remember Dr. Flemming's testimony here, the original thought in stockpiling aluminum for defense needs was to have enough in the stockpile with the known capacity to run us for 3 to 5 years. If, as is indicated, our aluminum capacity is going way up, it is conceivable that a year or two's production may be all you need and you may not even need a stockpile.

Mr. GRAY. I certainly think that is possible, and I think it is very clear that we will have, as a result of what we have already stockpiled and what we are being required to take under these "put" contracts, more than we need for defense purposes. I think this is going to be crystal clear.

Mr. SHEEHAN. And then the Government or the Office of Defense Mobilization will have a big problem figuring out what to do with it.

Mr. GRAY. This is going to be a problem in other areas than aluminum, as well.

Mr. SHEEHAN. Mr. Gray, I would like to direct a question along the line the chairman pursued about what the Office of Defense

Mobilization has done to help business—our small business. I won't say primarily, but certainly we are greatly interested in it. In response to Mr. Yates, he had asked how ODM had helped small business, and just to get on the record, it seems to me that your Department has taken quite a few steps. In the first place, you mention in your statement on page 4 that by mutual agreement between the companies you increased the amount of aluminum from 25 to 35 percent, that they were going to have to give to nonintegrated producers, and that certainly would be eventually a help to small business, don't you think?

Mr. GRAY. Well, I think it would. Actually, this was negotiated by the General Services Administration, but it is in the overall interest of small business in the expansion programs.

Mr. SHEEHAN. You also state on page 4 that you have assisted in the expansion of the aluminum companies, that the Government purchase obligations alone would supply about 228,000 tons, or almost two-thirds of the 1957 consumption, to nonintegrated producers. Certainly a sizable portion of this would find its way to small business if it were able to use it?

Mr. GRAY. I think that that is quite clear; yes, sir.

Mr. SHEEHAN. Also, in your contracts for the past number of years and especially in view of the new negotiations you are carrying on, the set-asides of new production for nonintegrated producers, meaning mainly small-business men, they would be assisted by that large term project that the Government has?

Mr. GRAY. I think that is true, yes.

Mr. SHEEHAN. Now, I notice that Mr. Yates had wondered and worried about the fact whether General Motors and Ford and some of these bigger users, whether they could be considered small business.

Mr. YATES (interposing). I don't worry about that. I know they can't be. [Laughter.]

Mr. SHEEHAN. I think if I might interpret it, it seems to strike me that would leave an impression that although nonintegrated users were consuming more aluminum due to the fact that Ford and General Motors and some of the big corporations may be in it, that the smaller business man may not be getting as good a percentage as he formerly had, and therefore I was wondering if you would be kind enough to look at table 6 with me. It seems to me that in the breakdown here of the use from 1950 to 1957—there are 5 different categories here, many of which of course, or most of which are not used by the big manufacturers in automobile parts. Let's take for instance sheet and plate from 1950 to 1957, the integrated producers increased their use from 982,912 pounds to 1,188,000, or, roughly, they increased 20 percent. On the other hand, nonintegrated producers in the same field increased from 45,000 (I'm using round figures) to 133,000, or an increase of 180 percent. It seems to me that most of the smaller business men, no question about it, rather than the nonintegrated producers, more than any gained their part with the business.

Mr. GRAY. Very definitely.

Mr. YATES. This assumes the term nonintegrated includes small business. If, however, that percentage may include companies such as Ford and General Motors, or companies who manufacture appliances who might be almost of the same size, whose percentage of increase may have contributed toward that tremendous increase,

small-business firms might not have enjoyed that same increase, is that not accurate, too?

Mr. GRAY. I would not think the facts would support that supposition.

Mr. YATES. The best way to get the facts is to look at Mr. Kendall's table when he gets it for us.

Mr. GRAY. We will try to get that for you.

Mr. SHEEHAN. I think Mr. Yates would be correct in his analysis if this were a complete picture and if we look at other things. The same way with Ford. That is one of these five categories where the nonintegrated producers did not hold their own. You will notice in 1950 75,000 and in 1957 140,000 for the integrated producers. In other words, they doubled themselves by very nearly 90 percent. Whereas the nonintegrated went from 28,000 to 45,000, where in that particular division the nonintegrated users did not quite hold their own with the integrated users. Carrying that analysis further, wire and covered cable certainly does not include some of the new users coming into the field, such as General Motors and Ford, on the hot-metal contracts, from 1952 to 1957.

The nonintegrated producers more than held their own, showing an increase of 27,000 to 45,000, or 40 percent; whereas the integrated producers only increased theirs 20 percent. The same way with the cable which shows a remarkable increase in division No. 4 here, the integrated producers increased theirs from 100,000 to 110,000, or an increase of only 10 percent, whereas the nonintegrated producers went from 32,000 to 68,000, an increase of 110 percent. And more remarkable than any, is the extruded shapes and drawn tube. We have had many witnesses before us here, Mr. Gray, from the extruded business, worrying and concerned about getting more aluminum and in this last table it shows integrated producers in 1950 produced 193,000 tons and in 1957 271,000 or an increase of approximately 50 percent, but the nonintegrated users, meaning none of the big original pro ducers of aluminum, increased from 102,000 in 1950 to 424,000 in 1957, an increase of 400 percent. So, it would seem to me rather conclusive that the small-business segment, meaning any one who is not connected with the integrated original producers, have more than held their own in the expanding economy of aluminum. Is that a fair conclusion or not?

Mr. GRAY. That would be my conclusion, Mr. Sheehan.

Mr. SHEEHAN. Well, I think, Mr. Gray, that it would be logical to assume that because from the tables you have furnished us on page 6, that the whole segment of the aluminum using industry has grown and the nonintegrated, in the uses shown in these 5 categories, have not grown proportionately as much as the integrated, and your assumption has been to increase the use of the nonintegrated users.

Mr. GRAY. Yes.

Mr. SHEEHAN. That is all.

Mr. YATES. Mr. Gray, let's look at page 2 of title No. 6. Those figures are significant, too, aren't they? Showing the percentage of users by the integrated and the nonintegrated, showing how they have increased over the years.

And I come back to my other assumption, we still don't know, do we, with respect to the material that appears on page 1 of table 6 as to whether the nonintegrated user to which your data refers can properly be classified as small business?

Mr. GRAY. To answer your question, I do not know what percentages are in this category that would be classified as small business; no.

Mr. YATES. Kennecott Wire & Cable Co. wouldn't be considered a small business, would it? For example, a wire user, I notice under a list that has been furnished by GSA, we have American Brass Co., of course that is a subsidiary of Anaconda and I don't know whether or not American Brass is now considered a part of the integrated or whether it is a nonintegrated producer as of November 4, 1957, for the purpose of this directory prepared by the BDSA. I think perhaps we are speaking in the dark here. We just don't know what is made up of the so-called nonintegrated producer at this point. We have to find out by a better breakdown of those figures as to whether or not small business has enjoyed this very substantial increase that has accrued over the years, and as it appears in table No. 6, or whether this is big business (I was going to say hiding in the form of nonintegrated but I don't think that is proper at this point) whether big business is included at that point, so that we get a wrong impression that small business is being adequately taken care of here. I assume the data Mr. Kendall is going to furnish us will bring enlightenment on this particular point.

May I ask 1 or 2 more questions? This committee is concerned with other metals than aluminum too. Have you met your goals with any other metals than aluminum?

Mr. GRAY. Most of them.

Mr. YATES. You have met them for most of them.

Mr. GRAY. Yes.

Mr. YATES. As I remember, there are something like 84 metals in the stockpile?

Mr. GRAY. About 75 categories. Oh, no, I beg your pardon. I'm sorry, Mr. Chairman. This is not all metals. It is metals, minerals, and all kinds of things in these categories, but with respect to most of the categories in the stockpile, we have met our goals. Indeed, in the funds we are requesting for fiscal year 1959, there is contemplated new procurement in only about 12 items out of the 75. I believe that there is not new procurement with respect to any metal in 1959.

Mr. YATES. Mr. Floete is valiantly attempting to cut back the Government's liability under any of these contracts.

Mr. GRAY. He is trying to negotiate a reduction wherever he can and I think doing a fine and splendid job.

Mr. YATES. I think he is, too. When he appeared before our subcommittee, he said he thought he should not sell Nicaro at this time because of the fact he didn't think he could get an adequate price for it. Has ODM withdrawn its approval?

Mr. GRAY. No.

Mr. YATES. Is Mr. Floete still trying to find a buyer for Nicaro at this time?

Mr. GRAY. I would prefer, Mr. Chairman, that you ask him that question when he comes up here tomorrow.

Mr. YATES. We will ask him that question tomorrow, but as I remember the press release, that first came out announcing the fact that Nicaro was for sale, he said that it was in accordance with an ODM direction.

Mr. GRAY. I think not direction.

Mr. YATES. ODM approval?

Mr. GRAY. ODM approval.

Mr. KENDALL. As to the legal situation with respect to that, Mr. Chairman, the only approval he needs is that of the Secretary of Defense. This is under a different statute entirely.

Mr. YATES. ODM doesn't enter into the picture?

Mr. KENDALL. We are interested in the picture because of the output of the plant, but the plant itself is held in the National Industry Reserve Act and the GSA is the outfit that controls the plant and would sell it, and the consent required is that of the Secretary of Defense. This is the legal situation.

Mr. GRAY. However, he did consult us about that, Mr. Chairman. I don't want to leave the impression that we weren't interested in it.

Mr. YATES. Does ODM think it should be sold?

Mr. GRAY. We think it is all right to sell it, if, in the judgment of the Administrator, this is the best disposition to be made of it. We feel if it is sold, it should be sold with certain guaranties of percentages of production to our use if we should need it, but we do not see the necessity for continued Government operation and ownership of the plant.

Mr. YATES. Nicaro is making money now; isn't it?

Mr. GRAY. It has been. Right at the moment, I don't know. As you know, nickel has turned around substantially in the last year as far as supply and demand is concerned. We are having to take under the nickel "put" contracts and I am sure that the output of Nicaro has suffered recently the same fate as the output of other nickel producers. Whether at the moment it is making money, I really don't know. It has been a profitable operation when business was good for nickel.

Mr. YATES. Do you have any other questions?

Mr. SHEEHAN. No.

Mr. YATES. Mr. Gray, thank you very much for coming before us and giving us the benefit of your advice.

Mr. GRAY. Thank you.

(The prepared statement submitted by Gordon Gray reads in full as follows:)

STATEMENT OF GORDON GRAY, DIRECTOR, OFFICE OF DEFENSE MOBILIZATION

Mr. Chairman and members of the committee, I appreciate this opportunity to discuss with you developments in the aluminum industry and their significance to small business.

The outstanding development in the industry during the last several years is the tremendous increase in its capacity to produce aluminum. Since the outbreak of the Korean war, production capacity has increased nearly a million tons and is still going up. To the large number of aluminum fabricators, most of them in the small-business category, this has meant a relatively assured source of raw material against which to plan their own operations.

MATERIALS FOR DEFENSE

One of the primary responsibilities of the Office of Defense Mobilization is to assure the availability of adequate supplies of strategic and critical materials to meet the needs of national emergency. This entails determining the requirements of our Defense Establishment and of that essential portion of civilian industry which must be maintained under conditions of full mobilization. These needs are then balanced against the total availability of the materials. If a shortage of supply is shown, measures must be devised to meet the shortage. Among the

alternatives are: expanding the capacity of the producing industry or establishing a stockpile of the scarce materials. If these alternatives are not sufficient, reliance must be put on plans to restrict the use of, or encourage the substitution of other less critical materials in the event of mobilization.

ALUMINUM SUPPLY

The total supply of aluminum to American industry stems from domestic primary production; secondary metal; and imports. Secondary metal (both domestic and imported) averages about 22 percent and imports of primary metal about 13 percent of domestic primary production. Canada is the only country which has supplied the United States with metal during wartime. In peacetime imports from other countries have been nominal. The single year 1953 was exceptional. Because of heavy military demands the total domestic supply was inadequate to meet both military and civilian demand and caused total imports to reach the second highest tonnage on record. (The highest tonnage was in 1945 when Canada, the only foreign supplier in that year, liquidated its wartime contracts with the United States and shipped in 332,000 tons.) Even in 1953 total imports from all countries except Canada were only about 4 percent of the United States total supply. Attached table I shows the sources of the Nation's aluminum supply since 1940.

EXPANSION SINCE 1940

In 1940 total United States primary production was 206,000 tons of pig and ingot. The peak World War II production was achieved in 1943 with an output of 920,000 tons. This quantity was not again approached until 1952 when output amounted to 937,000 tons. By January 1, 1958, capacity had virtually doubled and reached 1,841,500 tons. Additional capacity planned by 1960 will raise the total to more than 2,600,000 tons, almost triple the 1952 level. (See attached table 2.)

EXPANSION GOAL

The shortage of aluminum during World War II and the demand arising from the military buildup accompanying the Korean war demonstrated the necessity for substantially expanding primary aluminum capacity. In 1950 domestic primary production was 719,000 tons. On March 31, 1952, an expansion goal was established for primary aluminum to increase the Nation's capacity to 1,546,000 tons per year by January 1, 1955. On October 1, 1952, this goal was revised upward to 1,746,000 tons by January 1, 1955. Certificates authorizing accelerated amortization over a 5-year period for tax purposes were issued under this goal for plants having a total estimated annual capacity of 777,000 tons. (See attached table 3.) This increase, plus privately financed expansion projects undertaken without Government assistance, exceeded the goal and the goal was closed on September 22, 1955.

PURCHASE CONTRACTS

As part of the expansion program there were offered in most instances purchase contracts which permitted the Government on the one hand to claim the total output of such facility for defense production or the stockpile. On the other hand the contracts required the Government to purchase any metal from the new plants which the company was unable to use or market in its normal operations. These contract provisions ran for 5 to 6 years from the time the plants began production. They further provided that two-thirds of the expanded production, minus military set-asides and Government purchases, should be made available to nonintegrated consumers. The details of the administration of these contracts have been explored rather completely in earlier meetings with your committee. The accompanying tables show the current status of these contracts. (See attached table 4.)

Under the contracts the Government ordered and purchased 493,668 tons for the national stockpile in the years 1953 through 1956. The Government was required to take 208,144 additional tons under the companies' options to "put"

through 1957. In addition, the Government is still contingently liable for the purchase of 757,110 tons of aluminum under the outstanding contracts. (See attached table 5.)

The minimum stockpile objective computed on the basis of a 5-year emergency has been exceeded. We are at present considering the recommendation of the Special Stockpile Advisory Committee that stockpile objectives should be revised to provide only for a 3-year emergency. If such a change is adopted the requirements for aluminum will be substantially reduced and inventories will exceed the maximum objective.

There has been one recent significant change in these contracts. The original contracts provided that after 5 years 25 percent of the expanded production was to be offered for sale to nonintegrated users for a period of 15 years. Last fall this requirement was increased to 35 percent by mutual agreement between companies which are in production and our delegate agency, the General Services Administration.

Shipments of aluminum millshapes in 1957 by the nonintegrated producers amounted to 359,000 tons. (See attached table 6.) The aluminum used for such production was acquired from the usual sources, i. e., primary producers, secondary producers, and imports. The provision of the Government purchase contracts that a portion of the assisted expansion be offered for sale for a period of 15 years following the termination of the direct Government purchase obligation would alone supply about 228,000 tons or almost two-thirds of the 1957 consumption by this group of nonintegrated producers.

ENCOURAGEMENT OF COMPETITION

While striving for an adequate defense position, the Government has consistently sought to develop competition in the production of primary aluminum and to encourage the entrance of new producers. With the end of World War II the disposal of Government-owned facilities for the production of aluminum was undertaken by the Surplus Property Board. Planning favored the creation of strong competitors for the original sole producer in the United States. Two such integrated competitors were established in the course of the surplus disposal program, i. e., Reynolds and Kaiser.

Under the expansion goal during Korea all increases in production were welcomed and new producers were given every encouragement possible under existing laws. It is noted that each new producer of aluminum metal began its production because it wanted metal for its own fabrication into products. Each new producer has hitherto had a surplus of raw metal which it has made available to other consumers of the raw metal as long as the supply lasted or, as at present, as long as the demand would utilize it.

Three new producers of primary metal are being established (in addition to expansion by the three previous producers). Each of these companies represented established fabricators of nonferrous metals (including aluminum), and therefore is assured of its own firm market for its own raw metal. Only one of these new producers has a Government purchase contract (Harvey).

It is believed that the aluminum expansion program has greatly improved the supply of metal available to small-business users. This is generally illustrated by the accompanying table (see attached table 6) showing shipments of aluminum mill shapes by integrated and nonintegrated producers over the past 7 years. While it is not proper to consider all nonintegrated fabricators as small business, a substantial portion is in the small-business classification. The table shows that in 4 of 5 major categories of mill shapes the nonintegrated producers have bettered their share of the market in a rather substantial degree. Only in the case of foil have the nonintegrated producers failed to improve their relative positions.

The capacity which now exists and which is being brought in by the industry will contribute to filling the growing metal requirements of business concerns. While a large proportion of this capacity was encouraged and assisted by the Government, it should be noted that over the next 3 or 4 years the industry is planning further extensive additions to their facilities which will again increase the supply of aluminum for all consumers, including those in the small-business classification.

TABLE 1.—*United States supply of aluminum*

[In thousand short tons]

Year	United States production		Imports		Total supply
	Primary	Secondary	Primary	Secondary	
1940	206	80	17	1	304
1941	309	107	13	[1] 0	429
1942	521	196	112	[1] 0	829
1943	920	314	136	[1] 0	1,370
1944	776	326	100	2	1,204
1945	495	298	332	5	1,130
1946	410	278	41	16	745
1947	572	345	16	16	949
1948	623	287	83	72	1,065
1949	604	181	77	40	902
1950	719	244	177	68	1,208
1951	837	293	122	20	1,272
1952	937	305	128	7	1,377
1953	1,252	369	301	27	1,949
1954	1,461	292	215	15	1,983
1955	1,566	336	178	41	2,121
1956	1,679	340	216	26	2,261
1957	1,648	360	222	16	2,246
1958 [2]	1,650	330	203	15	2,198

[1] Less than 500 tons.
[2] Estimated.

TABLE 2.—*Primary aluminum ingot capacity in United States*

[In short tons]

Company and plant site	Dec. 31, 1957	Completed as of Apr. 1, 1958	Under construction	Total by Jan. 1, 1960
Aluminum Company of America:				
Alcoa, Tenn	157,100			157,100
Badin, N. C	47,150			47,150
Evansville, Ind			150,000	150,000
Massena, N. Y	112,250		37,500	149,750
Port Comfort, Tex	120,000		20,000	140,000
Rockdale, Tex	150,000			150,000
Vancouver, Wash	97,500			97,500
Wenatchee, Wash	108,500			108,500
Total	792,500		207,500	1,000,000
Reynolds Metals Co.:				
Arkadelphia, Ark	55,000			55,000
Jones Mills, Ark	109,000			109,000
Listerhill, Ala	77,500	37,500	[1] [2] 75,000	190,000
Longview, Wash	60,500			60,500
Massena, N. Y			100,000	100,000
San Patricio, Tex	95,000			95,000
Troutdale, Oreg	91,500			91,500
Total	488,500	37,500	175,000	701,000
Kaiser Aluminum & Chemical Corp.:				
Chalmette, La	247,500			247,500
Mead, Wash	176,000			176,000
Ravenswood, W. Va	36,000	36,000	73,000	145,000
Tacoma, Wash	41,000			41,000
Total	500,500	36,000	73,000	609,500
Anaconda Aluminum Co.: Columbia Falls, Mont	60,000			60,000
Harvey Aluminum Co.: The Dalles, Oreg			[1] 54,000	54,000
Ormet Inc. (Olin-Revere), Omal, Ohio			[1] 180,0009	180,000
Total others	60,000		234,000	294,000
United States total	1,841,500	73,500	689,500	2,604,500

[1] To be completed in 1958.
[2] 37,500 tons now in production, Apr. 10, 1958.

TABLE 3.—*Primary aluminum production*

Company	Annual capacity	Estimated dollar amount of certified facilities
	Thousand short tons	*Millions*
Alcoa [1]	205	$206.9
Kaiser [1]	228	197.7
Reynolds [1]	180	145.0
Harvey [1]	54	55.5
Anaconda	50	[2] 65.3
Ormet (Olin Mathieson)	60	[3] 108.0

[1] Figures quoted from 7th Annual Report of the Activities of the Joint Committee on Defense Production, dated Jan. 16, 1958.
[2] Total certificate. From records in Facilities Certification Division (ODM).
[3] Latest estimate of cost of reduction plant (85 percent complete Dec. 31, 1957).

TABLE 4.—*Aluminum expansion*

Reduction plants	Annual expanded capacity	Date of contract	Start of production	Termination	
				Contract date for completion of production [1]	Actual or estimated date for completion of production
	Short tons				
Aluminum Company of America:					
Port Lavaca, Tex.	120,000	Dec. 19, 1950	May 26, 1952	July 1958	August 1957.
Wenatchee, Wash.	85,000	Oct. 19, 1951	Mar. 4, 1953	June 1959	July 1958.
Rockdale, Tex.	205,000		Apr. 8, 1954		
Kaiser Aluminum & Chemical Corp.:					
Chalmette, La.	100,000	Dec. 19, 1950	Dec. 3, 1952	July 1958	January 1958.
Spokane, Wash.	20,000	Oct. 31, 1951	Mar. 1, 1953	March 1958	October 1957.
Chalmette, La.	100,000	Nov. 6, 1951	Nov. 14, 1953	June 1959	September 1958.
Tacoma, Wash.	8,200	Feb. 28, 1952	Mar. 1, 1953	March 1958	March 1958.
	228,200				
Reynolds Metals Co.:					
Jones Hill, Ark. / Troutdale, Oreg. / Corpus Christi, Tex.	100,000	Dec. 19, 1950	Oct. 26, 1952	July 1958	May 1958.
Longview, Wash.	20,000	Sept. 13, 1951	Sept. 13, 1952	September 1957	November 1957.
Corpus Christi, Tex. / Arkadelphia Tex.	60,000	Nov. 9, 1951	Mar. 27, 1954	June 1959	August 1959.
	180,000				
Harvey Machine Co.:					
The Dalles, Oreg.	54,000	Sept. 13, 1955	Nov. 1, 1958	November 1964 [2]	

[1] Subject to force majeure.
[2] Or with production of 270,000 tons after date of completion.

NOTE.—Any quantity of the new production not sold or used by the contractor in his own fabricating operation may be tendered to the Government, and the Government is required to purchase.

TABLE 5.—*Aluminum expansion*

[Short tons]

	Purchases-calls				Puts, 1957 [1]	Total purchased as of Dec. 31, 1957	Remaining put rights (estimated)						Total remaining put rights	Total calls, puts, and remaining puts
	1953 [1]	1954 [1]	1955 [1]	1956 [1]			1958 [1]	1959 [1]	1960 [1]	1961 [1]	1962 [1]	1963 [1]		
Aluminum Company of America	5,971	[2] 131,539	38,834	3,983	67,998	248,325	110,125	24,375	----------	----------	----------	----------	134,500	382,825
Kaiser Aluminum & Chemical Corp	----------	94,976	54,120	3,978	100,147	253,221	97,012	14,716	----------	----------	----------	----------	111,728	364,949
Reynolds Metals Co	10,631	90,837	57,428	1,371	39,999	200,266	137,367	103,515	----------	----------	----------	----------	240,882	441,148
Harvey Machine Co	----------	----------	----------	----------	----------	----------	----------	54,000	54,000	54,000	54,000	54,000	270,000	270,000
Total	16,602	317,352	150,382	9,332	208,144	701,812	344,504	196,606	54,000	54,000	54,000	54,000	757,110	1,458,922

[1] Calendar year.

[2] An additional 7,397 short tons was purchased under the excess power cost program.

TABLE 6.—*Gross shipments of aluminum mill shapes by integrated and nonintegrated producers, 1950–57* [1]

AMOUNTS IN THOUSANDS OF POUNDS

Mill shapes	1950	1952	1953	1954	1955	1956	1957
Sheet and plate	1,028,131	991,788	1,269,850	1,057,485	1,465,696	1,510,335	1,321,584
Integrated producers	982,912	944,258	1,198,048	993,900	1,366,018	1,387,965	1,188,278
Nonintegrated producers	45,219	47,530	71,802	63,585	99,678	122,370	133,306
Foil	103,065	85,124	119,470	151,598	200,258	186,812	185,724
Integrated producers	75,050	57,832	82,567	105,242	142,696	136,878	140,260
Nonintegrated producers	28,015	27,292	36,903	46,356	57,562	49,934	45,464
Wire and covered cable	(2)	70,489	75,525	72,251	102,792	120,271	99,331
Integrated producers	(2)	42,814	45,075	41,079	60,223	60,985	53,736
Nonintegrated producers	(2)	27,675	30,450	31,172	42,569	59,286	45,595
ACSR and bare cable	132,710	176,754	140,550	147,166	157,237	188,282	179,227
Integrated producers	100,366	129,383	101,329	110,857	115,681	112,241	110,369
Nonintegrated producers	32,344	47,371	39,221	36,309	41,556	76,041	68,858
Extruded shapes and drawn tube	296,587	360,688	486,117	523,248	731,555	731,556	695,747
Integrated producers	193,849	217,910	274,856	244,933	325,908	284,949	271,665
Nonintegrated producers	102,738	142,778	211,261	278,315	405,647	446,607	424,082

See footnotes at end of table, p. 366.

TABLE 6.—*Gross shipments of aluminum mill shapes by integrated and nonintegrated producers, 1950–57* [1]—Continued

PERCENT OF TOTALS

Mill shapes	1950	1952	1953	1954	1955	1956	1957
Sheet and plate	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Integrated producers	95.6	95.2	94.3	94.0	93.2	91.9	89.9
Nonintegrated producers	4.4	4.8	5.7	6.0	6.8	8.1	10.1
Foil	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Integrated producers	72.8	67.9	69.1	69.4	71.3	73.3	75.5
Nonintegrated producers	27.2	32.1	30.9	30.6	28.7	26.7	24.5
Wire and covered cable	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Integrated producers	(2)	60.7	59.7	56.9	58.6	50.7	54.1
Nonintegrated producers	(2)	39.3	40.3	43.1	41.4	49.3	45.9
ACSR and bare cable	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Integrated producers	75.6	73.2	72.1	75.3	73.6	59.6	61.6
Nonintegrated producers	24.4	26.8	27.9	24.7	26.4	40.4	38.4
Extruded shapes and drawn tube	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Integrated producers	65.4	60.4	56.5	46.8	44.6	39.0	39.0
Nonintegrated producers	34.6	39.6	43.5	53.2	55.4	61.0	61.0

[1] Data are not available for 1951. Excludes "captive" producers, i. e., producers who do not sell the mill shapes produced but which they use in further fabrication.

[2] Not available.

NOTE.—Integrated producers are Alcoa, Reynolds, and Kaiser. Anaconda Aluminum Co. became a producer of primary aluminum in late 1955, but its affiliated companies, American Brass Co. and Anaconda Wire & Cable Co., are included here with nonintegrated producers to maintain continuity and avoid possible disclosure.

Source: Department of Commerce, BDSA, Aluminum and Magnesium Division, Feb. 26, 1958.

Mr. YATES. We will adjourn until tomorrow morning at 10 a. m. We will meet in room 304.

(Whereupon, at 11:45 a. m., the subcommittee recessed to reconvene at 10 a. m., Wednesday, May 7, 1958.)

ALUMINUM INDUSTRY

WEDNESDAY, MAY 7, 1958

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE NO. 3 ON MINERALS AND
RAW MATERIALS OF THE SELECT
COMMITTEE TO CONDUCT A STUDY AND
INVESTIGATION OF THE PROBLEMS OF SMALL BUSINESS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 11:15 a. m., in room 304, Old House Office Building, Hon. Sidney H. Yates (chairman of the subcommittee) presiding.

Present: Representatives Yates (presiding) and Sheehan.

Also present: Irving Maness, counsel; Katherine C. Blackburn, research analyst; and Victor P. Dalmas, adviser to minority members.

Mr. YATES. The hearing will come to order. Mr. Floete, may we have the benefit of your advice?

TESTIMONY OF HON. FRANKLIN G. FLOETE, ADMINISTRATOR, GENERAL SERVICES ADMINISTRATION

Mr. FLOETE. Good morning.

Mr. YATES. Good morning, Mr. Floete. It is a pleasure to see you again. We see each other annually. This is in the nature of a quarter-annual visit since our last meeting. I am delighted to see that you have your very able Comptroller with you and I am trying to remember the name of the other gentleman.

Mr. FLOETE. Mr. Pike, the counsel.

Mr. YATES. Yes. We had some business before the Appropriations Committee, too. I understand you have no general statement that you are submitting this morning.

Mr. FLOETE. That is correct, sir, because I was not aware of the exact nature of the meeting.

Mr. YATES. You would prefer to know what the committee is after and wait to see what questions the committee is asking. As you and Mr. Medley recall, we asked some questions before my Appropriations Subcommittee pertaining to the amendments to the existing contracts between the Government and the various aluminum producers. I am still not clear on what the import of those contracts is. Under the amendments, can the Government be charged with imports that are made by any of the primary producers insofar as their tender rights under their existing contracts are concerned?

Mr. FLOETE. No. The amendments actually covered six specific points. Of course, the problem, the most important one, was our right to deduct imports from their "put" rights. I might mention the others, just to bring them in to focus and then, particularly, the

import provision. In the first one on the other five we established a uniform method of computations, for, if they had not been uniform, it would have caused a great deal of trouble and loss of time. We clarified the question of freight allowances. The price previously had been fixed as of the date of shipment. On a rising market, of course, that many times worked to the disadvantage of the Government, so we changed that. We changed the provision as to the grade of the aluminum, which theretofore had been at 99.0 percent purity, which is not stockpile grade, and it must now be stockpile grade. We increased the amount of availability for 15 years after the termination of the contracts to the nonintegrated users from 25 to 35 percent, which is a 40-percent increase. Lastly, came the matter of deduction of purchases of primary metal. That, of course, was one of the strongest contested provisions. These contracts were all made during 1950 and 1952, under the stress of the Korean war. They were completely silent as to that particular feature. Just nothing was said in the contracts about them. Accordingly, the companies all took the same position, that we had no right to deduct such primary purchases. So we started at just the opposite ends of the poles. They contended that there was no provision, there was no requirement that they deduct any, and we on the other hand contended that the entire amount should be deducted.

The result after many hours of labor was that the companies finally agreed to a provision that requires such purchases to be deducted. I think there has been some misconception as to how it works, but we stipulated an amount, an exact amount in each case, which was the amount that they then had on order with Alcan. It further provided that, should their purchases nevertheless exceed those amounts, the increased amount must be deducted.

Mr. YATES. In its testimony before this committee, Alcan stated that it had amended its purchase order with Alcoa to defer part of the primary metal which Alcoa had purchased from Alcan under the provisions of a long-term contract. I asked the question at that time of the witnesses before us, as to whether the amount so deferred was to be deducted from the tender rights under its contract with the Government. There wasn't anything specific stated there. Is it your understanding that any deferral of imports are in the same class so that they would be regarded as deductions from tender rights under existing contracts?

Mr. FLOETE. Yes, I don't think the subsequent deferrals would have any effect on it because we predetermined the amount. In the case of Alcoa, I think it was 132 million pounds.

Mr. YATES. Suppose they import more than that?

Mr. FLOETE. Then we would deduct more.

Mr. YATES. You have a certain formula in your amendment, haven't you, on this point? Is this a 100-percent deduction of any amounts that are imported from the tender rights of the Government?

Mr. FLOETE. Yes, 100 percent.

Mr. YATES. And that includes any deferrals that are made under the existing contract, as well?

Mr. FLOETE. Yes.

Mr. YATES. This applies to the Kaiser contracts? Well, I see Mr. Pike has a frown on his face.

Mr. PIKE. No, Mr. Yates, I say this. The Alcan contract that Alcoa had called for in excess of 132 million pounds, but at the time we negotiated they had deferred delivery, so that only 132 million pounds, or perhaps even a smaller figure, was deliverable during the life of the Government's supply contracts. What we deducted was not the whole, I believe 165 million pounds under the Alcan contract, but the 132 million pounds that were called for delivery during the life of the Government contracts. Now, if they deferred more than that, so that the actual delivery was, say 100 million pounds, they would still deduct 132 million pounds. If, however, they took in excess of 132 million pounds, the excess would be deducted from the tender rights.

Mr. YATES. So that the Government is protected completely on the question of imports so far as the tender rights are concerned.

Mr. PIKE. Yes. That is correct.

Mr. YATES. Does the same fact pertain to the Kaiser contract?

Mr. PIKE. That is correct.

Mr. YATES. Is this in accordance with GAO's understanding of the contract, as well? Have you had any occasion to discuss this with GAO?

Mr. FLOETE. Mr. Medley knows about that feature.

Mr. MEDLEY. Subsequent to a telephone call from you one day, Mr. Yates, we conferred with GAO and to the best of my knowledge that is their understanding of the contract. I think they are here though, and can speak.

Mr. YATES. I wondered whether that was your understanding that was their view. Was there any discussion as to whether or not the amount of scrap purchased by the primary producers should have a bearing on the tender rights of the Government?

Mr. FLOETE. Yes, sir. There were extensive discussions. When we first initiated these discussions. Well, of course, they were initiated some years before, I believe, but actually—we seriously started to consider them in June of last year and that was one of the points that we discussed at the very first meeting, when we tried to get a groundwork under which we could discuss these various subjects. We continued to discuss it throughout the proceedings, but the companies maintained that, as to their toll rights, that was a vested right, that it had been a matter of commercial practice for many years, and that they would not change it. They felt essentially the same way about other scrap. So, to be perfectly frank, the net result is that we were unable to get a provision that would have covered those two items, scrap and toll scrap. You must understand, Mr. Chairman, that these were firm contracts, that had been entered into, and the companies had been performing under them for over 4 years; that we had to negotiate to secure as much as we could and yet we were not able, as it usually the case, to secure everything that we started for. I just must admit we were unable to achieve anything as to that.

Mr. YATES. In principle, the scrap is the same as imports, isn't it? Insofar as the Government's tender rights are concerned? You can envision companies doing their contractual requirements, doing the purchase of the scrap and putting to the Government in accordance with the contract.

Mr. FLOETE. I don't think there is any doubt of it. It might be of interest to the committee to know what the present situation is as to the Government's liability, extreme liability for the remainder of these contracts.

Mr. YATES. It would be of interest to the committee.

Mr. FLOETE. This was as of March 31. In the case of Alcoa, we still have the maximum obligation of 73,149 tons, or $37,569,000.

Mr. YATES. Is this on the 24-cent price, current price?

Mr. FLOETE. Yes, 24 cents. On the Kaiser contracts, 62,561 tons; $30,360,000. On the Reynolds contracts, 145,006 tons; $70,618,000. For a total of approximately—I have not added it up here—280,000 tons.

Mr. YATES. Roughly, $140 million.

Mr. FLOETE. Yes. Starting from a base of 3 million tons and some billion, $350 million. So we have about 10 percent left of the maximum liability.

Mr. YATES. What is our liability to Harvey? Do you think that should be included too?

Mr. FLOETE. Well, the liability to Harvey is, of course, as it was originally; 270,000 tons and at those prices $129,600,000. No deliveries, of course, have been made by Harvey because the plant is not yet complete.

Mr. YATES. Did you state for the record what the savings to the Government would be as a result of your amendment of your contracts with Alcoa and Kaiser to exclude imports?

Mr. FLOETE. That including Reynolds——

Mr. YATES (interposing). Well, Reynolds doesn't have any imports.

Mr. FLOETE. No, but you see we negotiated these contracts individually so there were differences in each one and we did secure concessions from Reynolds so we can put a dollar value on it. $11,280,000 in the case of Reynolds.

Mr. YATES. Based on what? If Reynolds doesn't import, how do you save money on this sort of amendment?

Mr. FLOETE. Because of a concession we got from them with reference to their set-aside program; $130,000 of it was for reduction in tender rights prior to April 1, 1957, as well as an adjustment for military set-asides. There was an adjustment of their inventory, 4 items amounted to $11,280,000; $42,930,000 in the case of Kaiser; and $43,950,000 in the case of Alcoa.

Mr. YATES. Was this a part of the report you made to Senator Robinson's committee as to the savings?

Mr. FLOETE. I think so.

Mr. MEDLEY. Yes.

Mr. YATES. Is that an exhibit which may go into the record to show just what the savings were?

Mr. FLOETE. Yes.

Mr. YATES. Will you hand that to the reporter, please.

(The matter referred to is as follows:)

EXHIBIT B.—*Potential savings to the Government under aluminum supply contract amendments (as compared in September 1957)*

	Quantity (in pounds)	Value
Alcoa:		
Reduction in tender for the production period ended Mar. 31, 1957	40,000,000	$10,000,000
Reduction in tender rights for the production period Apr. 1, 1957 to completion	132,000,000	33,750,000
Reduction under price protection provision	20,000,000	200,000
Total Alcoa		43,950,000
Kaiser:		
Reduction in tenders for the production period ended Mar. 31, 1957	7,000,000	1,750,000
Reduction in tender rights for the production periods Apr. 1, 1957 to completion	158,000,000	41,080,000
Reduction under price protection provision	10,000,000	100,000
Total, Kaiser		42,930,000
Reynolds:		
Reduction in tender rights for the production periods Apr. 1, 1957 to completion (estimated primary purchases)	500,000	130,000
Reduction in tender rights for the production periods Apr. 1, 1957 to completion (estimated pro-rata share military set-asides)	37,000,000	9,500,000
Reduction by reason of inventory freeze as of Mar. 31, 1957	6,400,000	1,600,000
Reduction under price protection provision	5,000,000	50,000
Total, Reynolds		11,280,000
Total potential savings		98,160,000

Mr. FLOETE. That is priced out at 26 cents, by the way.

Mr. YATES. Yes. Has Mr. Medley computed the savings that have accrued to the Government on the potential liability when the price was reduced from 26 to 24 cents?

Mr. FLOETE. I believe he did. While he is looking for that, I might say that we have pursued the same policy with reference to other contracts for the stockpile purchases and have attempted to get changes or eliminations in quite a number of them. We have been working on that for some time.

Mr. YATES. Of course, I know in connection with the appropriation hearings what you have been attempting to do, and I think you have done a very fine job and I think you are doing a very fine job on that. Have you had any success with Freeport Sulphur in reducing that ore contract?

Mr. FLOETE. No, sir. We had extensive hearings last week.

Mr. YATES. Incidentally, I asked you the question I asked Mr. Gray yesterdey. He stated this was still a bad time for metals prices. Have you taken Nicaro off the market?

Mr. FLOETE. I guess my answer is still the same as it was the last time. We have not put it on.

Mr. YATES. I thought you were looking for bids?

Mr. FLOETE. No——

Mr. YATES (interposing). I remember a press release indicating that you were looking for bids.

Mr. FLOETE. Well, we were simply advising possible customers that at some time in the future we may put it on the market, and we have asked them as to their interest and we have told them they can go down and look at the plant if they want to, and quite a few have gone.

Mr. YATES. You mean at the present time?

Mr. FLOETE. There is no one going right now.

Mr. YATES. Do you need approval from any agency in order to put that plant on the market? Do you need approval from the Secretary of Defense?

Mr. FLOETE. Yes, because it is a part of the national industrial reserve, under Public Law 883. It gives him authority to determine in the first place whether it is needed for national defense or whether it should be held in the mobilization reserve. But we have cleared that. We went to them over a year ago and finally received a letter last September which gave us the permission to go ahead initially on the basis of a lease, but the letter further stated that should we receive offers to purchase, they would be given due consideration also. I think the letter is sufficiently broad to permit us to do either one at the proper time. I do feel very strongly that we ought to get out of the business, but whether it is a propitious time or not, I doubt it.

Mr. YATES. The Appropriations Committee considers you to be a pretty good businessman. They didn't think this was the time to sell Nicaro, depending, of course, on what the offers were.

Mr. FLOETE. We have had troubles down there, of course, as a result of the uprising, but fortunately the plant has not been damaged, not seriously.

Mr. YATES. Well, you have made a pretty good contract for the Government recently in connection with your ore supplies there, haven't you? I thought I read an announcement in the paper that you had finally signed up a contract for the purchase of some ore supplies close by; it didn't have to depend so much on Freeport?

Mr. FLOETE. No, we have been in negotiation with Bethlehem Steel Co. for some time. They own a very large body of ore in close proximity to the Nicaro plant. They made us an offer but we have not accepted it because even at this moment we don't know just how many tons of ore is involved or what the ore assays. Until you know those two simple things, you don't know whether you are paying too much. We have had to interrupt our drilling down there to determine the nickel content of the ore. Because of the recent trouble, we have had to take the men off. We were actively doing it and had it substantially completed, but now it may be several months before we can complete it, even if things quiet down now.

Mr. YATES. Do you have have copies of the amendments that we may make a part of the record? We have the original contracts in the record of an earlier hearing. We would like to get copies of the amendments.

Mr. FLOETE. We can supply them. Do you have them?

Mr. MEDLEY. Yes.

(The amendments so referred to in connection with the Reynolds Metals Co., Aluminum Company of America, and Kaiser Aluminum & Chemical Corp. are as follows;)

SEPTEMBER 16, 1957.

REYNOLDS METALS CO.,
Richmond, Va.

GENTLEMEN: In connection with your recent tenders of primary aluminum pig pursuant to contracts Nos. GS-OOF(D)-12068, -12202, and -12214 each of us agreed that we would exert our best efforts to resolve certain differences with re-

spect to those contracts. As a result of those efforts, it is now mutually agreed, with respect to those contracts, as follows:

1. LIMITATIONS ON TENDERS

The amount of any tender of primary aluminum by you to the Government in respect of production during the production year April 1, 1957, through March 31, 1958, during the production year April 1, 1958, through March 31, 1959, and during the period after March 31, 1959, to the completion of the "additional production" (as that term is defined in said contracts), plus the amount of all prior tenders in respect of production during such production year or period, respectively, shall not exceed an amount equal to the total production from the contract facilities from the beginning of such production year or period to the end of the calendar month preceding the date of such tender, less the sum of (*a*) the total amount of primary aluminum purchased and received by you during such production year or period, except receipts of primary aluminum obtained through arrangements with customers whereby customers receive a substantially equivalent amount of metal further advanced in fabrication, (*b*) the total amount of shipments of primary aluminum made during such production year pursuant to contracts with nonintegrated users if the amount was deducted from your advertising obligation, and (*c*) the amount of shipments of primary aluminum pursuant to priority rated orders applicable to contract production on the basis of the ratio of contract to noncontract production during the applicable calendar quarter.

2. COMPUTATION OF TENDERS

The quantity of primary aluminum that you may be entitled, subject to the limitation of section 1, to tender to the Government during the first 10 days of any calendar month is an amount equal to the total production from the contract facilities (within the meaning of said term "additional production") from April 1 of the applicable production year or period to the end of the calendar month preceding the date of the tender, less:

(*a*) The total of the amounts of any prior tenders to the Government (or Government calls applicable to contract production), in respect of such production year or period, whether or not deliveries have been made;

(*b*) The total of the amounts of sales and utilization of aluminum from the contract facilities during such production year or period through the end of the calendar month preceding the date of the tender (excluding shipments represented by amounts deducted under clause (*a*) above and shipments under tenders in respect of prior production years).

Such total of sales and utilization of aluminum from the contract facilities for the purpose of this clause (*b*) shall be computed, with due regard for your rights of substitution under said contracts, in the following manner:

From the sum of your inventory of primary aluminum at your contract facilities as of March 31, 1957 (which for this purpose shall be deemed to be 6,440,096 pounds), plus the amount of all tenders in respect of the preceding production year that were not shipped at the beginning of the applicable production year or period (as deducted under (iv) below), plus the total production of primary aluminum at all your smelting plants during the applicable production year or period, there shall be deducted (i) your inventory of primary aluminum at all your smelting plants as of the end of such production year or period, but not less than 6,440,096 pounds, (ii) your total production of primary aluminum other than "additional production" during such production year or period, (iii) all actual shipments under prior tenders and calls, in respect of such production year or period, the amounts of which were included in the deduction pursuant to clause (*a*) above, and (iv) shipments made or to be made under tenders in respect of the preceding production year. The result is the amount of sales and utilization of aluminum from the contract facilities for the purpose of this clause (*b*).

Upon acceptance of this latter agreement, you shall forthwith furnish the Government computations of your rights pursuant hereto to tender aluminum pig for the period from April 1 through July 31, 1957, and for the period April 1 through August 31, 1957. On or before the 10th day of October 1957, and the 10th day of each month thereafter you shall furnish the Government a computation of your rights to tender aluminum pig as of the end of the preceding month, computed in accordance with the provisions of this latter agreement, whether or not any tender is, in fact, made with respect to such month. Your right to tender metal as of any calendar month shall be computed by considering all prior months in the production year or period as a single period.

3. DELIVERIES TO THE GOVERNMENT

For the purpose of making deliveries of primary aluminum tendered to the Government, contract facility metal may be delivered whether or not produced during the current production year, provided the quantity delivered is not in excess of the quantity which you are entitled to tender pursuant to the provisions of this letter agreement. You may, however, substitute aluminum made at other than contract facilities as permitted by paragraph (b) of article VI of said contracts, provided that written notice of your intention to make substitution shall be given to the Administrator of General Services prior to shipment.

4. PAYMENTS

Following receipt from you of the computations of your rights to tender aluminum pig for the period from April 1, 1957, through July 31, 1957, and for the period from April 1, 1957, through August 31, 1957 (which computations shall be subject to verification by the Government), the Government shall promptly issue shipping instructions in accordance with such computations. No payments, other than those heretofore made, shall be made until January 16, 1958, for metal tendered to the Government for the production year ending March 31, 1958. On that date you shall be paid the sum of $25,750,000, provided at least that amount is owing in due course with respect to metal previously shipped to the Government. All additional payments for primary aluminum shipped to the Government in respect of the production year ending March 31, 1958, shall be paid in due course, except that none of such additional payments shall be made prior to March 16, 1958 (other than for shipments not in excess of the difference between $25,750,000 and the amount actually paid on January 16, 1958), and the additional payments on that date shall not exceed $25 million. The sum of all payments prior to August 1, 1958, for shipments in respect of production during the production year ending March 31, 1958, shall not exceed the amount that may be owing with respect to shipments of a quantity of aluminum equal to 60 percent of the total production from the contract facilities during such production year. Payments for additional shipments up to 20 percent of the total production shall be deferred until August 1, 1958, and for the remaining shipments up to 20 percent of the total production until August 1, 1959.

Payment for shipments in respect of production during the production year ending March 31, 1959, shall be made in due course, except that the maximum payments to you from April 1, 1958, through March 31, 1959 (exclusive of payments for shipments in respect of the production year ending March 31, 1958), shall not exceed the amount that may be owing with respect to shipments of a quantity of aluminum equal to 60 percent of the total production from the contract facilities during the production year ending March 31, 1959. The remaining payments shall be deferred until August 1, 1959. Payment for shipments in respect of production after March 31, 1959, shall be made in due course.

5. TRANSPORTATION ALLOWANCES

All shipments of aluminum hereafter made pursuant to these contracts shall be made f. o. b. point of origin (or shipping point), freight allowed. For this purpose, the freight allowance shall be an amount equivalent to the lowest published common carrier freight rate available, including transportation tax, in effect on the date of shipment. However, if the Government determines that because of military necessity time is of the essence, and rail or truck transportation is specified, then the allowance shall be based on the lower of published rail or truck common carrier freight rate, calculated as specified above.

6. QUALITY OF METAL

All primary aluminum actually delivered by you to the Government pursuant to tenders made after September 10, 1957, shall be of a minimum grade of 99.3 percent purity and an average grade of 99.6 percent purity, and otherwise conform to stockpile specification P–62–R–1, dated July 30, 1954.

7. SALES TO NONINTEGRATED USERS

Your obligation to make available for sale to nonintegrated users annually a quantity of aluminum equal to 25 percent of the annual capacity of the additional smelting facilities, as more fully provided in article VII of said contracts, shall be increased so that you shall make available annually, pursuant to the terms of said article VII of said contracts, a quantity of aluminum equal to 35 percent of the annual capacity of said facilities.

8. PRIOR TENDERS

You have tendered to the Government, and the Government has accepted 65 million pounds of primary aluminum in respect of the production year ended March 31, 1957. The acceptance of that amount of primary aluminum is hereby ratified and constitutes a complete fulfillment of the Government's obligation to accept tenders of primary aluminum pig in respect of such production year.

9. ADVERTISING

In view of the changes made by this letter agreement, you may revise your quarterly advertising reports for the quarters April through June, and July through September 1957.

10. COMPUTATION OF PRODUCTION

After March 31, 1957, in computing and reporting production to the Government, production will be deemed to be pot room weights including metallic additions.

11. PRICE PROTECTION

The price for any metal tendered to the Government after March 31, 1957, shall be the price provided for in the above-captioned supply contracts, except that the price for any quantity tendered, instead of being the price in effect at the time of delivery, shall be the lower of (*a*) the price in effect at the time of delivery or (*b*) the price in effect at the end of the earliest prior consecutive month after March 1957 in respect of which you shall have filed a report showing that you were entitled to tender such quantity of metal. Notwithstanding the foregoing provisions, the price for metal tendered by you to the Government during June, July, and August 1957, and all overshipments pursuant to prior tenders shall be at the price in effect on July 31, 1957.

12. FORMAL CONTRACT AMENDMENTS

The parties shall, as promptly as possible, prepare and execute formal amendments to the supply contracts above referred to. Until such amendments are executed, this letter agreement, upon acceptance by you, shall constitute a binding agreement between us amending said contracts, subject, however, to the condition contained in the following section.

13. CONSENT REQUIRED

You have advised us that your acceptance of this letter agreement will require the consent of the financial institutions that have made loans to you in reliance upon said contracts. If, within 60 days from the date hereof, you advise us that you have been unable to obtain such consents, then this letter agreement shall be null and void.

Sincerely yours,

UNITED STATES OF AMERICA,
By FRANKLIN G. FLOETE,
Administrator of General Services.

Accepted this 16th day of September 1957.

REYNOLDS METALS CO.,
By C. E. COGHILL,
Vice President and Treasurer.

SEPTEMBER 13, 1957.

ALUMINUM COMPANY OF AMERICA,
Pittsburgh, Pa.

(Attention: Mr. Leon E. Hickman, vice president and general counsel.)

GENTLEMEN: In connection with the Government's partial acceptance of your tender of April 2, 1957, of primary aluminum pig pursuant to contracts GS–OOP–(D)–12007 and –12096, each of us agreed that we would exert our best efforts to resolve certain differences with respect to those contracts. As a result of our negotiations, the following agreement has been reached with respect to those contracts:

1. TENDER FOR YEAR ENDING MARCH 31, 1957

You have tendered to the Government 250 million pounds of primary aluminum pig on account of production during the contract year ending March 31, 1957. The Government accepts 210 million pounds of the amount so tendered (including 100 million pounds previously accepted by General Services Administration's letter to you of May 29, 1957) upon the understanding that such acceptance constitutes a complete fulfillment of the Government's obligation to accept tenders of primary aluminium for such year, and that regardless of the date of delivery the prices of such pig shall be your published prices in effect on March 31, 1957, for the grade, form, size, and quantity involved. Upon your acceptance of this letter agreement the conditions stated in the aforementioned letter of May 29, 1957, will have been satisfied, the Government will no longer withhold any part of the invoice value of the metal delivered pursuant to this agreement, and all retentions heretofore made will be paid to you forthwith.

2. TENDERS FOR PERIOD AFTER MARCH 31, 1957, TO COMPLETION

A. The quantity of primary aluminum pig that you will be entitled to tender to the Government with respect to production subsequent to March 31, 1957, shall be the amount of "additional production" (as that term is defined in the said contracts) on and after April 1, 1957, to the end of the period with respect to which the amount of the tender is computed, reduced by the sum of the amounts determined under the following clauses (1)–(4), each amount being determined as of the end of the period with respect to which the amount of the tender is being computed:

(1) The total amount of all prior tenders made with respect to such period and accepted by the Government, whether or not deliveries have been made thereunder.

(2) The total amount of all Government calls made with respect to such period, whether or not deliveries have been made thereunder.

(3) The total amount of shipments of the "additional production" during such period (excluding, however, shipments under tenders and calls the amounts of which were deducted under clauses (1) and (2) above, and shipments under tenders with respect to the contract year ending March 31, 1957.) Such total amount of shipments of the "additional production" shall be computed, without regard to actual physical shipments and with due regard for your rights of substitution under said contracts, in the following manner: From the sum of (i) your inventory of primary aluminum at all your smelting plants as of March 31, 1957, plus (ii) the total production of primary aluminum at all your smelting plants subsequent to March 31, 1957, there shall be deducted (iii) your inventory of primary aluminum at all your smelting plants as of the end of the period with respect to which the amount of the tender is being computed, the result being deemed to be the amount of primary aluminum sold and utilized. From this result there shall be deducted (iv) your total production of primary aluminum other than "additional production" subsequent to March 31, 1957, the resulting difference being deemed to be the total amount of shipments of the "additional production" during such period. All actual physical shipments under tenders and calls, the amounts of which were deducted under clauses (1) and (2) above, and shipments under tenders with respect to the contract year ending March 31, 1957, shall then be deducted to determine the net amount to be deducted under this clause (3).

(4) The total amount of shipments of primary aluminum pig, ingots, and billets made during such period from other than "additional production." If such shipments were made pursuant to a contract of sale with a nonintegrated user or pursuant to a priority rated order and the amount of the contract or rated order was deducted from your advertising obligation for the quarter in which such material was shipped, or if such shipments were made to a nonintegrated user in lieu of adding the quantity thereof to the quantity to be advertised in a subsequent quarter.

B. Notwithstanding the provisions of paragraph A above, in no event shall your tender with respect to production subsequent to March 31, 1957, exceed the amount of "additional production" (as that term is defined in the said contracts) on and after April 1 of the applicable contract year to the end of the period with respect to which the tender is made, reduced by the following:

The total amount of purchased primary aluminum pig and ingot received by you during such year; provided, however, that there shall not be included

in such receipts any primary aluminum received by you under toll, purchase and exchange, or other similar arrangements, in connection with which you are obligated to delivery or sell an approximately equal amount, in pounds or value, of a different aluminum product; and provided further that the tenders with respect to "additional production" subsequent to March 31, 1957, may not exceed an aggregate of 195 million pounds.

C. Upon your acceptance of this letter agreement, all prior tenders with respect to the period beginning April 1, 1957, shall be deemed canceled without prejudice to your right to renew such tenders, computed in accordance with the provisions of this agreement. You shall forthwith furnish the Government a computation of your rights to tender aluminum pig for the period from April 1, 1957, to August 31, 1957, and thereafter on or before the 10th day of October 1957 and each month thereafter you shall furnish the Government a computation of your rights to tender aluminum pig as of the end of the preceding month, computed in accordance with the provisions of this agreement, whether or not any tender is, in fact, made with respect to such period or month. Your right to tender metal in respect of the production period beginning April 1, 1957, shall be cumulative until the completion of such "additional production." Tenders in whole or in part within such cumulative rights, in respect of the production period beginning April 1, 1957, may be made on or before the 10th day of any calendar month within such period and on or before the 10th day following the completion of all "additional production."

D. The price of aluminum pig tendered to the Government with respect to the period subsequent to March 31, 1957, shall be determined as provided in paragraph 2 of article XI of said contracts except that the price shall be the lowest price in effect during the month with respect to which the right to tender that amount of aluminum pig, computed in accordance with this section 2, first arose.

3. DELIVERIES TO THE GOVERNMENT

Metal delivered pursuant to tenders to the Government shall be metal produced from the "additional facilities" (as that term is defined in the said contracts), whether or not such metal was produced during the contract year with respect to which the tender was made. You may, however, substitute aluminum made in other facilities as permitted by paragraph Z of article VI of said contracts provided that prior written notice of your intention to make substitution shall be given to the Administrator of General Services prior to shipment.

4. PAYMENTS

You are to ship the 110 million pounds of primary aluminum pig remaining to be delivered with respect to the contract year ending March 31, 1957, in the amount of 36 million pounds in October 1957, 37 million pounds in November 1957, and 37 million pounds in December 1957, payment therefor to be made in due course as provided in the contracts, except that the payment for shipments in November 1957 shall be made on January 16, 1958, and payments for December 1957 shall be made not prior to January 16, 1958. The Government will issue appropriate shipping instructions with respect to each month's shipments on October 1, November 1, and December 1, 1957, so that you may maintain an orderly shipping schedule throughout each month. Shipments pursuant to tenders of "additional production" after March 31, 1957, may be made during the calendar year 1958 as you may elect; and shipping instructions will be issued as requested with respect to metal appropriately tendered to the Government: *Provided, however,* That you are not to bill the Government for metal shipped to it in 1958 at a rate cumulatively in excess of 16,250,000 pounds a month. That is to say, you may bill the Government in the month of January 1958 for not to exceed 16,250,000 pounds; in February 1958 for an amount which, when combined with January bills, will not exceed 32,500,000 pounds; or in March 1958 for an amount which, when combined with bills in January and February 1958, will not exceed 48,750,000 pounds; and so on until the last of the aluminum tendered and shipped hereunder shall have been paid for.

5. TRANSPORTATION ALLOWANCES

All shipments of aluminum hereafter made pursuant to those contracts shall be made f. o. b. point of origin (or shipping point), freight allowed. For this purpose, the freight allowance shall be an amount equivalent to the lowest published common-carrier freight rate, including transportation tax, in effect on the date of the execution of the contract, except that, if such lowest rate is increased prior to the date of shipment, the applicable rate shall be the lowest published common-carrier freight rate in effect at the date of shipment.

6. QUALITY OF TENDERED METAL

Metal tendered to the Government pursuant to said contracts shall be of a minimum grade of 99.3 percent purity and an average grade of 99.6 percent purity and otherwise conform to stockpile specification P–62–R1: *Provided, however,* That with respect to all tenders applicable to production from additional facilities on and after August 1, 1957, such metal shall be of a minimum grade of 99.5 percent purity and otherwise conform to stockpile specification P–62–R1.

7. SALES TO NONINTEGRATED USERS

Your obligation to make available for sale to nonintegrated users a quantity of aluminum annually equal to 25 percent of the annual capacity of the additional aluminum smelting facilities, as more fully provided in article VII of said contracts, shall be increased so that you shall make available annually, pursuant to the terms of said article VII of said contracts, a quantity of aluminum equal to 35 percent of the annual capacity of the said facilities.

8. ADVERTISING

In view of the changes made by this agreement, you may revise your quarterly advertising reports for the quarters April through June, and July through September 1957.

9. COMPUTATION OF PRODUCTION

In computing and reporting production pursuant to section 2 hereof, production will be pot-room weights including metallic additions.

10. FORMAL CONTRACT AMENDMENTS

The parties hereto shall, as promptly as possible, prepare and execute formal amendments to said contracts so as to incorporate therein the terms of this agreement. Until such amendments are executed, this letter agreement, upon acceptance by you, shall constitute a binding agreement between us.

Sincerely yours,

GENERAL SERVICES ADMINISTRATION,
By FRANKLIN G. FLOETE,
Administrator.

Accepted this 13th day of September 1957.

ALUMINUM COMPANY OF AMERICA,
By LEON E. HICKMAN,
Vice President.

SEPTEMBER 13, 1957.

KAISER ALUMINUM & CHEMICAL CORP.,
Washington, D. C.

GENTLEMEN: In connection with your recent tenders of primary aluminum pig pursuant to contracts Nos. GS–OOP(D)–12006, 12143, 12192, and 12213, each of us agreed that we would exert our best efforts to resolve certain differences with respect to those contracts. As a result of those efforts, it is now mutually agreed, with respect to those contracts, as follows:

1. LIMITATIONS ON TENDERS

The amount of any tender of primary aluminum by you to the Government in respect of production during the production year April 1, 1957, through March 31, 1958, plus the amount of all prior tenders in respect of production during such production year, shall not exceed an amount equal to the total production from the contract facilities from the beginning of such production year to the end of the calendar month preceding the date of such tender, less:

(1) an amount equal to 13,166,667 pounds multiplied by the number of full months of the contract year that shall have elapsed from the beginning of such production year to the end of the calendar month preceding the date of such tender; and

(2) the total additional amount of primary aluminum purchased and received by you during such production year except for (*a*) receipts of primary aluminum obtained through arrangements with customers whereby customers

receive a substantially equivalent amount of metal further advanced in fabrication, and (*b*) such amounts of primary aluminum as are in fact delivered to you pursuant to contracts in effect on or before June 11, 1957, and are not in excess of the quantities that would have been called for under the then existing provisions of such contracts, unless such additional amounts shall have been approved by the Administrator of General Services for delivery during such period.

The limitations specified above shall not apply to production years preceding or following the production year beginning April 1, 1957, and ending March 31, 1958.

2. COMPUTATION OF TENDERS

A. The quantity of primary aluminum that you will be entitled, subject to the limitation of section 1, to tender to the Government during the first 10 days of any calendar month is an amount equal to the total production from the contract facilities (within the meaning of the term "additional production" as used in those contracts) from April 1, of the applicable production year to the end of the calendar month preceding the date of the tender, less:

(1) The total of the amounts of any prior tenders to the Government, or Government calls applicable to contract production, in respect of such production year, whether or not deliveries have been made;

(2) The total of the amounts of shipments of aluminum from the contract facilities during such production year through the end of the calendar month preceding the date of the tender (excluding shipments represented by amounts deducted under clause (1) above and shipments under tenders in respect of prior production years);

(3) The total of the amounts of shipments of aluminum during such production year through the end of the calendar month preceding the date of the tender from other than contract facilities pursuant to a contract of sale with a nonintegrated user or pursuant to a priority rated order, if the sale was made under a contract or priority rated order which was deducted from your advertising obligation for the quarter in which such material was shipped, or if the sale was made to a nonintegrated user under a contract which was not deducted from your advertising obligation for such quarter, in lieu of adding the quantity to the quantity to be advertised in a subsequent quarter; and

(4) The total amount of any primary aluminum purchased and received by you during such production year, except for (*a*) receipts of primary aluminum obtained through arrangements with customers whereby customers receive a substantially equivalent amount of metal further advanced in fabrication, and (*b*) such amounts as are in fact delivered to you pursuant to contracts in effect on or before June 11, 1957, and are not in excess of the quantities that would have been called for under their then existing provisions, unless such additional amounts shall have been approved by the Administrator of General Services for delivery during such period.

B. You shall determine and advise the Administrator of General Services of the quantity of your inventory of primary aluminum produced by the contract facilities and on hand at the contract facilities on March 31, 1957, such quantity shall be subject to verification by the Administrator. For the purpose of this provision, all primary aluminum produced at your Tacoma plant, and on hand at that plant on March 31, 1957, shall be considered as the inventory of contract facility metal at your Tacoma plant, except that the quantity of primary aluminum at that or any other contract facility which was tendered and accepted on account of production for the production year ending March 31, 1957, but had not been shipped on March 31, 1957, shall not be considered as a part of the inventory on that date. An amount equal to 50 percent of said March 31, 1957, inventory of contract facility production as so determined and verified by the Administrator of General Services, but not in excess of 7 million pounds, may be sold or otherwise utilized by you, other than by tender to the Government, and the shipment of such quantity of primary aluminum will not be included as shipments under section 2A (2) or section 2A (3), above.

C. Shipments from your Tacoma plant shall be included in the computation of shipments under section 2A (2), above, only to the extent that such shipments exceed the aggregate of the noncontract production at that plant.

D. The amount of primary aluminum at a contract facility that was produced by facilities other than the contract facilities shall be separately accounted for and shipments thereof shall not be taken into account in computing shipments under section 2A (2), above.

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E. If, in computing the amount of primary aluminum that you are entitled to tender to the Government, a quantity of aluminum is deducted in accordance with section 2A (3), above, then an equivalent quantity may be excluded from the deduction otherwise called for by section 2A (2), above.

3. DELIVERIES TO THE GOVERNMENT

For the purpose of making deliveries of primary aluminum tendered to the Government, contract facility metal may be delivered whether produced during the current contract year or during a prior contract year, provided it is metal produced from the contract facilities and the quantity delivered is not in excess of the quantity which you are entitled to tender pursuant to the provisions of this agreement. Nothing contained herein shall limit your right to substitute metal produced at other facilities in making deliveries to the Government, as provided in article VI (b) of Contract No. GS-OOP(D)-12006 and the corresponding provision of the other above captioned contracts.

All primary aluminum actually delivered by you to the Government pursuant to tenders made after September 10, 1957, shall be of a minimum grade of 99.3 percent purity and an average grade of 99.6 percent purity and otherwise conform to stockpile specification P-62-R-1, dated July 30, 1954.

4. SALES TO NONINTEGRATED USERS

Your obligation to make available for sale to nonintegrated users a quantity of aluminum annually equal to 25 percent of the annual capacity of the contract facilities, as more fully provided in article VII of contracts Nos. -12006 and -12143 and article VI of contracts Nos. -12192 and -12213, shall be increased so that you shall make available annually, pursuant to the terms of said articles of said contracts, a quantity of aluminum equal to 35 percent of the annual capacity of the contract facilities.

5. PRIOR TENDERS

With respect to the production year ending March 31, 1957, you have tendered to the Government, and the Government has accepted, 75 million pounds of primary aluminum. The acceptance of that amount of primary aluminum is hereby ratified and constitutes a complete fulfillment of the Government's obligation to accept tenders of primary aluminum pig for such year.

6. ADVERTISING

In view of the changes made in this agreement, you may revise your quarterly advertising reports for the quarters April through June, July through September, and October through December 1957.

7. REPORTS OF METAL ELIGIBLE FOR TENDER

During each month, you shall furnish the Government with a computation of your rights to tender metal as of the end of the preceding month, computed in accordance with the provisions of this agreement, whether or not any tender is, in fact, made with respect to such preceding month.

8. COMPUTATION OF PRODUCTION

After March 31, 1957, in computing and reporting production to the Government, production will be pot room weights including metallic additions.

9. PRICE PROTECTION

The price for any metal tendered to the Government after March 31, 1957, shall be the price provided in the above-captioned supply contracts, except that the price for any quantity tendered, instead of being the price in effect at the time of delivery, shall be the lower of (*a*) the price in effect at the time of delivery or (*b*) the price in effect at the end of the earliest prior consecutive month after March 1957 in respect of which you shall have filed a report showing that you were entitled to tender such quantity. The foregoing provision with respect to price protection shall apply only if the Government shall notify you of its acceptance of all tenders of primary aluminum which have been properly made and shall issue shipping instructions within 20 days of the date of tender. Notwithstanding the foregoing provisions, the price for metal tendered by you to the Government on July 8 and August 9, 1957, shall be the price in effect through July 31, 1957.

10. TRANSPORTATION ALLOWANCES

All shipments of aluminum hereafter made pursuant to those contracts shall be made f. o. b. point of origin (or shipping point), freight allowed. For this purpose, the freight allowance shall be an amount equivalent to the lowest published common carrier freight rate, including transportation tax, in effect on the date of the execution of this letter agreement, except that, if after the date of this letter agreement and prior to the date of shipment such lowest rate is increased, the applicable rate shall be the lowest published common carrier freight rate in effect at the date of shipment. However, if the Government determines that because of military necessity time is of the essence, and rail or truck transportation is specified, then the allowance will be based on the lower of published rail or truck common carrier freight rate, calculated as above specified.

11. DEFERMENT OF PAYMENT

Without affecting the quantity of metal which you may tender before or after January 15, 1958, you agree not to demand, and the Government shall not be required to make, payment between the date of this agreement and January 16, 1958, for more than 110 million pounds of metal tendered by you, including metal which you have previously tendered but which the Government has not accepted before the date of this agreement. The Government shall issue shipping instructions promptly upon receipt of tenders for all metal tendered before or after January 15, 1958. The Government shall make prompt payment upon delivery for all such tenders up to such 110 million pounds, and after January 16, 1958, the Government shall make prompt payment for all such tenders previously delivered in excess of such 110 million pounds.

12. Without affecting the rights and duties of the parties under those contracts, deliveries thereunder to nonintegrated users may at contractor's option be made by substituting aluminum produced from other facilities for aluminum actually produced at the contract facilities.

13. FORMAL CONTRACT AMENDMENTS

The parties shall, as promptly as possible, prepare and execute formal amendments to the supply contracts above referred to. Until such amendments are executed this letter agreement, upon acceptance by you, shall constitute a binding agreement between us amending said contracts, subject, however, to the condition contained in the following section.

14. CONSENT REQUIRED

You have advised us that your acceptance of this agreement will require the consent of financial institutions who have made loans to you in reliance upon said contracts. If, within 30 days from the date hereof, you advise us that you have been unable to obtain such consents, then this agreement shall be null and void.

Sincerely yours,

UNITED STATES OF AMERICA,
By FRANKLIN G. FLOETE,
Administrator of General Services.

Accepted this 13th day of September, 1957.

KAISER ALUMINUM & CHEMICAL CORP.,
By CHAD F. CALHOUN, *Vice President.*

Mr. YATES. Do you have that figure, Mr. Medley, as to the savings and the liability of the Government?

Mr. MEDLEY. Yes, Mr. Chairman. I believe we submitted some preliminary figures to counsel that indicated it would be approximately $9½ million, but we would like to supply some revised figures for the record, with one final thing we want to check. It will be in the neighborhood of about $7,400,000.

Mr. YATES. This is the current liability and current savings. Of course, these may be merely paper savings because we don't know whether the price is going to go up.

(The document referred to is as follows:)

ALUMINUM SUPPLY CONTRACTS

Revised May 9, 1958

Estimated savings on "put" metal to be delivered after April 1, 1958, assuming the domestic base price of aluminum is reduced by each of the companies from 26 to 24 cents per pound:

	Pounds	Amount
Alcoa:		
Total estimated tenders (period beginning Apr. 1, 1957, through contract termination dates)	195,000,000	
Less cumulative tender rights as of Mar. 31, 1958	171,608,000	
Estimated tenders at the reduced price	23,392,000	
Estimated savings at $0.02		$467,840
Kaiser:		
Total estimated tenders (period beginning Apr. 1, 1957, through contract termination dates)	346,656,000	
Less tenders scheduled for delivery prior to Apr. 1, 1958	238,115,129	
Estimated deliveries after Apr. 1, 1958	108,540,871	
Estimated savings at $0.02		2,170,817
Reynolds:		
Total estimated tenders (period beginning Apr. 1, 1957, through contract terminated dates)	496,764,000	
Less tenders scheduled for delivery prior to Apr. 1, 1958	257,537,985	
Estimated deliveries after Apr. 1, 1958	239,226,015	
Estimated savings at $0.02		4,784,520
Total		7,423,177
Harvey:		
Total production under contract	540,000,000	

NOTE.—It is not possible to anticipate at this time what deliveries, if any, will be made to the Government; consequently no estimated savings are shown.

Mr. MEDLEY. That is correct, sir.

Mr. YATES. The Government liability under the contract is at the published price. Has GSA made inquiry to determine whether there were sales of the primary metal at less than the public price?

Mr. FLOETE. We had heard that rumor, and as a matter of fact we had a letter from the General Accounting Office on that subject. I think our response, which went out last week, stated that we do not have any evidence of a continuing or widespread policy, either here or abroad, to disturb the price structure. I don't think there has been any departure domestically. As we understand it, there have been some spot sales abroad at less than the established—the commonly accepted market price; but we don't have enough evidence at the moment to express an opinion that that represents a departure from the terms of the contract.

Mr. YATES. In such occasions, do you ask for opinions as to whether they are departures from the contract, either GAO or the Attorney General?

Mr. FLOETE. We couldn't do it unless we had some pretty well-established facts. We don't have them yet.

Mr. YATES. There have been indications before the committee that there may be such things as hidden discounts through toll arrangements and scrap by paying more for scrap than the current market price. Is this a possibility of a subject for inquiry by GSA?

Mr. FLOETE. Well, I don't think that would be quite within the purview of GSA. That may be a matter of trade practices for the Federal Trade Commission.

Mr. YATES. Well, I suggest that for your consideration. It occurred to some of the witnesses and some of the complainants before this committee that paying for scrap at significant prices above the market price to customers who were buying primary metal, might very well be a device for paying less than a public price. I don't know whether this is true or whether it isn't, but perhaps GSA might want to take a look at it.

Mr. FLOETE. We will give it consideration.

Mr. YATES. What protection does the Government have against exorbitant prices where you have to pay the published prices?

Mr. FLOETE. I don't think it has any.

Mr. YATES. Well, you are really on the horns of a dilemma, aren't you, when you enter a long-term contract? In one case you take the published price and market price as it exists from day to day. You have certain defects. When you enter into contracts such as you entered into with Freeport Sulphur for nickel at a price of, I think, 74 cents—the prices have already gone down.

Mr. FLOETE. No, it is still 74 cents.

Mr. YATES. Still 74 cents on the market. You take the chance that the price may go down in the future just as it did in other nickel contracts that the Government entered into in 1952 and 1953.

Mr. FLOETE. That is right.

Mr. YATES. You are still trying to make the adjustment under those contracts, aren't you?

Mr. FLOETE. Yes, we just got one the other day that was worthwhile trying for. It was $25,700,000 in deduction of exposure under the long-term contracts that we had on nickel.

Mr. YATES. If there is no protection on this type of a contract for the Government against exorbitant pricing, other than, of course, the fact the rest of the trade, the rest of community pays the same price, I wondered was this taken into consideration in connection with your contract with Harvey, which was a similar contract to all the others?

Mr. FLOETE. It is essentially the same contract.

Mr. YATES. Was that the reason you entered into it, because it was the same? Did you consider the fact that perhaps the Government might be required—the Government should be protected by a ceiling on prices that were paid under this type of incentive contract?

Mr. FLOETE. Well, I wasn't here when the Harvey contract was made but I think the terms are the same.

Mr. YATES. Yes.

Mr. FLOETE. The same as the others, and I have heard it was presumed to be a part of the—what they call the second round of expansion. I think you also have to keep in mind that, except in the case of Reynolds, the companies all put up their own money. There was no loan guaranty or no direct loans by the Government to either Kaiser or Alcoa, and the contracts were designed, and of course for protection to them, in order to get them to expand their productive capacity. I think the fact it has turned out to be a good thing for them is just one of the results. We did get the added expansion that we were after, and we still have it. It would be fine if there could

have been a restriction on the price, but it isn't at all reasonable to think you can get that because they had to invest substantial amounts of money.

Mr. YATES. That is true. I think there are some very good arguments on their side as well as on the side of entering into the contracts on the part of the Government. You did get the expansion at the time you needed it.

Mr. FLOETE. Yes.

Mr. YATES. Yet, in retrospect, one wonders whether the Government couldn't have put in additional clauses that might have protected us to a greater degree.

Mr. FLOETE. I think the recent Freeport contract incorporated an idea and that is the cash recovery provision. Obviously if they recover all their cash investment, at that point they ought to start sharing the risk themselves, taking the risk themselves.

Mr. YATES. Will you explain to the committee how that works?

Mr. FLOETE. Well, the Freeport contract terminates by its terms in June 1965, that is one termination date. The second termination is when it produces 271 million pounds of nickel. The third termination date is when its cash return equals approximately $98 million, which is the estimated cost of the plant. Cash returns means profits plus depreciation, including rapid tax amortization. So at that point they have gotten back the total cost of their plant, and the contract terminates at that time. Now, I don't know what effect it would have had on these contracts, but there are tax amortizations in these aluminum contracts also, so I assume it probably would have worked a termination at an earlier date.

Mr. YATES. At the time you were negotiating these amendments for the primary producers, were they cutting back on production?

Mr. FLOETE. I suppose by the time we concluded them in September, that they may have been cutting back some of the production at their noncontract facilities, although I——

Mr. YATES (interposing). I wondered why you didn't raise this point with them. As I remember my principles of law, and it has been a long time, there is a liability, or a duty on the part of a contractor to lessen the liability of the person he has a contract with, to reduce the amount of money. I wondered why it wouldn't have been possible to negotiate an across-the-board reduction of production which would reduce the Government's liability in some manner rather than a cutback solely in old facilities. Was that mentioned at all?

Mr. FLOETE. Henry, will you answer the legal phase of that?

Mr. PIKE. Well, the contracts themselves contemplate the construction of additional facilities. I believe all the companies had planned, and some of them have opened, additional facilities. The contracts themselves expressly gave to the companies the right to utilize the production from the other facilities before utilizing the production from the contract facilities. So, an amendment in the nature that you suggest, while it may have been desirable, would have been completely contrary to the terms of the contract.

Mr. YATES. The contract provisions themselves permit the company to cut back on existing production completely while new production was producing in full, do I understand that?

Mr. PIKE. Yes; either to cut back or to enlarge.

Mr. FLOETE. And they all have enlarged.

Mr. YATES. On all facilities?

Mr. PIKE. Yes.

Mr. YATES. What they have done is cut back on production solely on their own facilities.

Mr. PIKE. Well, originally, they had enlarged some of their old facilities. Now, quite recently, they have cut back on some of their production and have stopped the further enlargement of their facilities.

Mr. YATES. They could have made the same argument with respect to imports though; couldn't they?

Mr. PIKE. The import question, Mr. Yates, involved firm long-term purchase arrangements, and that was the heart of it. Incidentally, that is how the import question really differed fundamentally from the scrap question. Each of the three companies had imported prior to the time we entered into these agreements but they had done so on a spot-purchase basis. Their later arrangements differed in that two of the companies entered into long-term arrangements which meant that they were still obligated to take the Canadian metal even though they were running into a declining market. Of course, in that period the effect is to throw it on the Government, but with spot purchases they could cut off the faucet at any time they wanted to. The same is true with respect to their other facilities operations, except for the economics of it.

Mr. YATES. Mr. Pike, that same argument would have prevailed with respect to scrap, too.

Mr. PIKE. Yes; and in that sense they continued, generally speaking, the practice that had been the industry practice prior to the inception of these contracts, but they had no industry practice of long-term arrangements with foreign producers.

Mr. YATES. Mr. Sheehan.

Mr. SHEEHAN. Mr. Floete, you realize that one of the things our committee is concerned about is protecting eventually or trying to see to it that the nonintegrated users of aluminum are assured somewhat of a supply so none of the Big Three gobble it up or none of the nonintegrated producers gobble up the supply. I know that you did say that GSA has worked out an arrangement with Alcoa, I believe, to increase the obligation to nonintegrated producers from 25 to 35 percent; is that right?

Mr. FLOETE. There was worked out in these amendments with all 3 of the producers a provision to increase it from 25 to 35 percent. That amounts to about 3 million tons a year, 350,000—or some billion eight hundred million dollars' worth of metal over the 15-year period that this clause affects. We had to struggle to get that one, too. That didn't come easy, and it came only in steps, and it didn't jump all the way from 25 to 35 percent. It was a progressive thing. It finally ended up at 35 percent.

Mr. YATES. Is this hot metal that Reynolds is furnishing to General Motors and Ford to be deducted from the amount that is allocated for nonintegrated users?

Mr. FLOETE. I think it would be. I can't construe it otherwise. Fortunately, Reynolds is the only one that has that type of thing. They have only one producing now; but they are going to have two others. Whether Alcoa and Kaiser will embark on the same thing, I don't know. I would think if it became a common effort, that it

actually did work to the disadvantage of the other nonintegrated users, I believe the companies would talk about it again.

Mr. YATES. Presumably, this provision was put in to protect the small-business person.

Mr. FLOETE. Yes.

Mr. YATES. If this is allowed as a deduction from the amount to be set aside for small business, I think small business isn't getting any benefit. You wouldn't consider Ford or General Motors a small business?

Mr. FLOETE. No. I think at the proper time, if that really happens and does work distinctly to their disadvantage, I believe the companies would be willing to discuss that phase of it again. I can't speak for them, however.

Mr. SHEEHAN. Along that line, Mr. Floete, and you can correct me because my memory isn't too good on this, it seems to me when the Government made a contract with Alcoa for their additional facilities in the early 1950's, there was some sort of provision in the set-asides for the nonintegrated producer, that if any one individual could get more than 500,000 pounds per month, GSA would have to O. K. it. Wasn't that put in the contract to make sure no one could gobble up all this?

Mr. FLOETE. Yes; that was for that purpose, but that provision only extends during the life of the contracts. The 15-year period begins after the contract has expired and the certificate was executed for this—I think it is a Jones Mills plant that belongs to Reynolds. It is the only one producing metal at the moment and they did get a certificate under that particular clause.

Mr. SHEEHAN. Only while the contract was in force.

Mr. FLOETE. That is all it is good for; yes.

Mr. SHEEHAN. So that once a contract expires, Alcoa, for instance, could ship 5——

Mr. FLOETE (interposing). Well, it isn't Alcoa.

Mr. SHEEHAN. Reynolds could ship any amount they wanted to a single individual customer?

Mr. FLOETE. Well, there is another provision that says on a first-come, first-served basis.

Mr. SHEEHAN. What I am trying to get at is, in your estimation, do you think the General Services Administration is following through in trying to carry out the recognized policy of trying to distribute the metal on a broad scale, especially to small-business men as we know them?

Mr. FLOETE. That would be my desire. I must say that in this particular case I was not aware of it. I admit that I should have been. Actually, the matter was never discussed at any of these hearings, any of these meetings we had. I don't think the subject ever came up once. Do you remember that it did?

Mr. MEDLEY. No.

Mr. FLOETE. Do you?

Mr. PIKE. No.

Mr. FLOETE. I think we missed.

Mr. SHEEHAN. Mr. Floete, I have some little line of reasoning and I would like to follow with reference to Government policy and I suppose first of all I should ask you, are you a lawyer or businessman?

Mr. FLOETE. Businessman, I guess.

Mr. SHEEHAN. The reason I ask this, with all deference to Mr. Yates, he is a lawyer and I am a businessman, and I find sometimes there is a difference in the philosophy of thinking about contracts and prices and what goes with it. Let me put it this way. I don't know of any lawyer who, if he makes an agreement with a contract for $50,000 fee and then finds out he only works half as hard as he thought he was, he doesn't go back to the client and say, "I didn't work as hard as I thought I was going to work and I will give you back $25,000." [Laughter.]

The lawyers as a rule set their fees and that is what they want. But I find sometimes there is a differentiation with businessmen. Now, I have heard the talk here this morning of the savings in the contracts and concessions from the company, and I have heard the word "negotiate" kicked around. I know as a businessman if I were doing business with the Government and I had a contract to sell aluminum or whatever it is for a certain price and the price should drop, I would expect the Government to stick to the contract they gave to me, but when the Government called me in to negotiate, I often wonder what negotiate means. Will you settle this peaceably and amicably or do you hold a hammer over their head and say, "if you don't negotiate, you will suffer in the future"?

Mr. FLOETE. I think, Mr. Sheehan, we have been very careful not to use that kind of tactics. Frankly, we have had meetings with a good many companies besides the three aluminum companies. We have a list of them here. In each case we have said the Government has every intention of living up to its obligations but we wish to present certain facts to you and see if we can't find a common basis on which to reduce the Government's exposure. Now, we have used persuasion, we have used the economic situation, we have used the amount in the stockpile, the excessive amount in many cases. We have no need for it, we don't want it. If it gets in there, it is overhanging the market and therefore affects them, that is one of the arguments we have used. I think in every case we worked it out to the satisfaction of the particular companies involved. I think I have the same philosophy that you do on the integrity of the Government's contract. There can't be any question about it, or our whole system of Government falls to pieces. But I believe you still can negotiate on a variety of points. Every contract is different. So you have to approach each one differently. Obviously all men are different too, so you have to approach all men differently. We hope that out of it we can achieve something.

Mr. SHEEHAN. I agree fully with your philosophy and I was just hoping that is the way the Government treated it because it is like a peace agreement after a war, it is negotiated but the victors are standing there with a club, you see, and many times the vanquished merely signs what is put in front of him. I was hoping and felt the Government at least in negotiation would negotiate at arm's length and not try to take advantage of the power they may have over the individual businesses. After all, when these contracts were originally set up, neither the company nor the Government, for instance, saw or foresaw the fact that they might buy certain amounts of aluminum from Canada and use that to make money with. That was just one of the things that eventually turned up, is that not right?

Mr. FLOETE. Yes. I think an interesting incident happened just recently in one of these negotiations. This was a long-term contract and the president of that particular company said, "I think it would be a good thing if we reduced the amount that we put to the Government so that we really get into the selling business at an earlier date." He said, "I think that would be good for our company rather than let the contract run out and all that time relying on sales to the Government." Now, just on that basis he made a very material concession.

Mr. SHEEHAN. Personally, I am very happy to hear of the philosophy of yourself and the Government in this case, because a question just arose in my mind that maybe these negotiations were not quite what they look like.

Mr. FLOETE. They are not loaded.

Mr. SHEEHAN. That is all.

Mr. YATES. Did GSA know about the Jones Mills hot metal operation before the public knew about it as a result of the additional contracts with Ford and General Motors?

Mr. FLOETE. Well, I can't answer that of my own knowledge. Can you, Mr. Medley?

Mr. MEDLEY. I answer it this way, Mr. Yates. According to the records, I didn't know about it personally, but according to the records the Reynolds Co. did come in to GSA to secure approval on that contract and——

Mr. FLOETE (interposing). It was April 7, 1953.

Mr. MEDLEY. That is correct, sir.

Mr. YATES. Why would Reynolds have to come to GSA to receive approval under the Jones Mills contract? Why couldn't it just enter into the contract with General Motors?

Mr. FLOETE. Because it exceeded 500,000 pounds a month.

Mr. YATES. And GSA approved it?

Mr. FLOETE. For a maximum of 3,410,000 pounds a month.

Mr. YATES. In computing the amount available for nonintegrated users under the formula, was the product of Jones Mills taken into consideration?

Mr. MEDLEY. As Mr. Floete has previously stated, the subject of molten metal was not discussed at any time in our negotiations last fall.

Mr. YATES. It was of particular importance, I think, during the periods of shortage like 1955 when this committee went into questions whether or not the primary producers were making available such amount of metal in accordance with their contract commitments. I wondered whether or not GSA considered this to be a part of that formula?

Mr. MEDLEY. Well, it is treated as a sale to nonintegrated users.

Mr. YATES. You don't agree with Reynolds that this is a new type of metal? The contention was made by Mr. McConnell when he testified before this committee that this was a fourth metal. It was a molten type of metal. If it is a molten type of metal, then it would not come within the formula, would it?

Mr. PIKE. Well, I think it is a different type of metal. Mr. Yates, all we are saying is that Reynolds Metals Co. came to GSA and asked permission under the clause relating to sales to nonintegrated users—

permission to enter into this contract in excess of 500,000 pounds per month, and that permission was granted.

Mr. YATES. What was the date that Reynolds Metals——

Mr. PIKE (interposing). 1953.

Mr. YATES. Apparently at that time Reynolds Metals considered it to be the same type of metal, otherwise it would not come under that clause of contract, is that correct?

Mr. PIKE. It would seem that is correct but I cannot say from personal knowledge, Mr. Yates.

Mr. YATES. As far as GSA is concerned, you consider that metal to be covered by the contract?

Mr. PIKE. We have given permission to so count it.

Mr. YATES. I think probably Mr. McConnell considered that in his previous testimony.

Mr. FLOETE. The possibilities of nonintegrated users getting more is enhanced by the fact that certain of the companies that were previously nonintegrated users, are now integrated, and so no longer will need the metal.

Mr. PIKE. Anaconda Copper and Harvey Aluminum will be.

Mr. YATES. This is true except you have companies like General Motors and Ford taking additional amounts. If the supply to them is considered as satisfying requirements under the formula of the contract, there won't be much available for other nonintegrated users under the provisions of that contract, and if the other primary producers go into hot metal contracts, as they may, there won't be much available for nonintegrated users.

Mr. SHEEHAN. May I ask a question?

Mr. YATES. Sure.

Mr. SHEEHAN. Mr. Floete, in response to Mr. Yates' statements, the plants that are going to be built in Alabama and New York, they are not Government plants. That is their own capital and they can do whatever they want with all that material, is that not right?

Mr. FLOETE. That is correct.

Mr. YATES. I was thinking of the Jones Mills operation.

Mr. FLOETE. On a completely different subject, if I may——

Mr. YATES. Sure, you may.

Mr. FLOETE (continuing). In relation to small business—and that is the efforts of a task force created in GSA a year and a half ago as the result of a Cabinet committee study on small business, the President wrote us a letter in September of 1956, delegating the responsibility to us for making the study. It has been going on ever since and I think we are accomplishing a good deal that will be beneficial to small business, to large business, and to the Government. We have adopted a good many practices that will unquestionably help small business.

Mr. YATES. The question occurred to me why you didn't amend the nonintegrated features of your contracts at the time you negotiated with the primary producers to change the form of the wording instead of perhaps nonintegrated it should have been broken down into a definition of small businesses rather than a nonintegrated user, in view of the fact that companies such as Ford and General Motors qualified as small business under the terms—I mean qualified as a nonintegrator in terms of small business.

Mr. FLOETE. Mr. Medley says that was discussed prior and never could get an agreement on it from the companies.

Mr. MEDLEY. That was one of the many things that were, you might say, the controversial features of the contract. We tried to get a new definition of nonintegrated users at one time but were not successful.

Mr. YATES. Was this true with respect to each of the companies? Whom did you approach on this?

Mr. MEDLEY. Prior to the negotiations which took place last June, Mr. Chairman, we held frequent meetings on an industry basis. We were trying to get these various problems solved. Finally we decided it was just impossible to get them solved on an industry basis, to make uniform amendments to all the contracts of these companies. So it was at that time we announced that we were no longer going to negotiate on an industry basis but to negotiate individual amendments with each company. The definition of nonintegrated users was one of the points we tried to settle when we were discussing these problems jointly with the three companies.

Mr. YATES (interposing). Well, you can see that the term nonintegrated user as it has been interpreted, doesn't protect small business very much, does it?

Mr. MEDLEY. Not with the introduction of this molten metal question.

Mr. YATES. Well, even without it, because General Motors and Ford buy pig, too, from the facilities. If they are not integrated users and if "Bohn" Aluminum, which are fabricators, are nonintegrated users, and if a number of other large corporations are nonintegrated users, a small-business person is going to come banging on the door of the Government and in another few years when the capacity of the company is going to be used to take care of the company's needs, we anticipate and they anticipate asking that something be done to supply them with some of this primary metal and we will be looking at these aluminum contracts again, trying to find some way to channel some of that aluminum into small business.

Wouldn't it be a good idea for GSA to talk to the aluminum companies again to see whether you could agree on a formula which would protect the rights of small business as small business, at some later time, in terms of this extension of the agreements you have mentioned, you have made it for nonintegrated users. Should not that term "nonintegrated users" have certain setasides for certain companies of certain sizes which qualify as small business?

Mr. FLOETE. I think it should be discussed.

Mr. YATES. Can you discuss it with them?

Mr. FLOETE. I am sure they will discuss it with us. I will be glad to do so.

Mr. SHEEHAN. Mr. Floete, the only place the Government can enter into the picture and tell anybody what to do is where they have contracts with them and helped to build their plants, isn't that right?

Mr. FLOETE. That is right.

Mr. SHEEHAN. Therefore, the only place where GSA has any control is just in these plants where the Government took an active interest in formulating a contract to help build or something.

Mr. FLOETE. That is correct.

Mr. SHEEHAN. Don't you have in all those contracts that are concerned with the Government production, at the present time a pro-

vision that over 500,000 pounds a month they have to get permission from you to sell a single nonintegrated user?

Mr. FLOETE. Yes, but that expires as these contracts expire.

Mr. SHEEHAN. As of this year.

Mr. FLOETE. Some expire next year.

Mr. SHEEHAN. After this year, they can sell to whoever they want and whatever amount they want, is that right?

Mr. FLOETE. We can't control the amount.

Mr. PIKE. Mr. Sheehan, even now they can sell whatever amount they want to. It is merely a question whether they can apply that amount toward their obligation to sell to nonintegrated users. That doesn't prohibit them from selling.

Mr. SHEEHAN. No, but it prohibits them from selling any single individual nonintegrated user over 500,000 pounds per month.

Mr. PIKE. No, it does not. It prohibits them from counting the sales that apply to their obligation, but it does not prohibit the sale.

Mr. SHEEHAN. Why would Reynolds come to you when they entered into this Jones Mills contract to get your permission?

Mr. PIKE. Permission to count the sales for the full amount as applied to their obligation to nonintegrated users.

Mr. SHEEHAN. That is exactly right. That is the point I am trying to make. They have to come to you to get permission to sell to nonintegrated users.

Mr. PIKE. No, even if we had denied them permission to count that sale against the obligation to nonintegrated users, they would still have the right to sell to General Motors.

Mr. SHEEHAN. But they still have to then get an additional amount to sell to nonintegrated users to fill the terms of their contract.

Mr. PIKE. That is right.

Mr. SHEEHAN. Therefore, small business was being protected by that limitation, isn't that right?

Mr. PIKE. I was not denying that. I was merely pointing out that they do have the right to sell. We are not restricting their right to sell.

Mr. SHEEHAN. I agree with you, but we are looking into the fact that nonintegrated producers in terms of the small-business man was being protected in the sense that metal was being shipped or delivered to him so that he had a source of supply. Now, as I understand the situation, when this contract runs out, GSA then has no control whatsoever to whom these people are going to sell.

Mr. YATES. That isn't true?

Mr. PIKE. The only control is through the first-come and first-served basis.

Mr. SHEEHAN. Now, we are talking about the 35 percent for 15 years.

Mr. PIKE. Each year. Each contractor is obligated to sell to nonintegrated users only a first-come, first-served basis.

Mr. SHEEHAN. Let's be specific. Let's take Alcoa, for the sake of argument and pick out a name. The 5 years have gone by, they can sell on a first-come, first-served basis. Supposing they take the entire output and sell it to General Motors. What happens then? Do you fellows have anything at all to say about that?

Mr. PIKE. On those bare facts, no.

Mr. SHEEHAN. In spite of the fact you stated 35 percent of the certain allocation has been given to nonintegrated producers and you don't specify anyplace or have any control over who is going to get it.

Mr. YATES. General Motors is a nonintegrated producer.

Mr. SHEEHAN. That is what I am trying to find out, what their definition is.

Mr. PIKE. The definition is in the original contract itself.

Mr. SHEEHAN. Therefore, the situation may arise that you have an agreement with them for 15 years to supply materials to nonintegrated users, and they may just sell 3 or 4 big customers and no one else is going to have any aluminum.

Mr. PIKE. That is right.

Mr. FLOETE. That is right.

Mr. PIKE. Mr. Sheehan, may I for purpose of clarification read the definition, and I think this is the same in all contracts.

Mr. SHEEHAN. I will have to consult my lawyer right away. [Laughter.]

Mr. PIKE. This contract that I am reading from, I just happened to pick at random, is a contract which Kaiser Aluminum & Chemical Corp., No. GS-OOP(D)-12143. The definition appears in article III, subsection (b) (1) which provides:

> As used in this Contract, the term "nonintegrated user" shall mean any manufacturer, fabricator, finisher or producer in the United States who is not a producer of primary aluminum or an affiliate or subsidiary of such a producer, and who is purchasing such aluminum for his own manufacturing, fabricating, finishing or producing operations.

Mr. YATES. I don't think we can really say small business is being protected under that definition or under the 35-percent clause. You are protecting nonintegrated users but I assume, and I think I assume correctly, that the original purpose of that clause was to try to protect small business but, I think through usage and through practice, small-business people have not been protected. That is why I suggest it would be a good thing for GSA, in view of the fact that it quite proudly presents this amendment to us this morning, to go back to the producers and try to make some kind of equitable adjustment for small business, as such.

Mr. FLOETE. I will be glad to try.

Mr. SHEEHAN. Mr. Yates, may I put one thing in there?

Mr. YATES. Sure.

Mr. SHEEHAN. I think you said the small integrated user was not protected?

Mr. YATES. If I did, I was wrong.

Mr. SHEEHAN. I want to get that corrected on the record. As I remember our previous hearings, although there was a great shortage in 1955 and 1956, the hearings turned out that practically all segments of the aluminum industry got more aluminum than they had been using previously, although they didn't get what they wanted.

Mr. YATES. I think this is true. I think the only suggestion that I make to GSA is that the definition should be amended more properly to protect small business.

Mr. SHEEHAN. I agree with that.

Mr. DALMAS. Mr. Chairman, I want to ask or point out that the contracts only apply to pig aluminum. Are you shaking your head?

Mr. PIKE. No, sir, that is not correct.

Mr. DALMAS. Well, I would like to be corrected on that.

Mr. PIKE. The contracts themselves pretty generally contemplate that the producers will provide facilities for manufacturing ingots and billets in addition to pig.

Mr. DALMAS. When you speak of nonintegrated user though, you are talking about someone who can use pig, ingot, or billet.

Mr. PIKE. I don't think many of your small producers can actually use pig.

Mr. DALMAS. That is right, that is what I was driving at.

Mr. PIKE. The contract does not provide that the offerings shall be in the form of pig.

Mr. DALMAS. It can be anything, any semifabricated or fabricated material.

Mr. PIKE. No.

Mr. DALMAS. To cover the 35 percent?

Mr. YATES. He is saying either pig, ingot, or billet. As I understand his testimony this morning in view of the application for approval for Reynolds Metals in 1953, molten metal is included under that contract, as well, isn't it? At least under Reynolds contract.

Mr. PIKE. Molten contract by Reynolds is not specifically contemplated.

Mr. YATES. Why did they come in for approval of their project?

Mr. PIKE. I can't answer that, Mr. Yates.

Mr. YATES. Well, if the only basis for coming in is the conclusion of Reynolds that either qualifies pig, ingot, or billet. Otherwise, there is no need to come in; is that correct?

Mr. PIKE. That would seem to be true.

Mr. YATES. And GSA gave them that permission; is that correct?

Mr. PIKE. Yes.

Mr. YATES. I think it might be argued, therefore, that if not originally contemplated, at least by this amendment, at least by this agreement there was a tacit amendment to the contract which included, at least for the Jones Mills operation, molten metal in the Reynolds contract. Is this an arguable position?

Mr. PIKE. I think that argument can be made, yes. I must say this, Mr. Yates, that I have not looked into the circumstances surrounding that.

Mr. YATES. Well, frankly, we have not either. We are just trying to obtain information. We didn't even have the questions down here to ask you, but it occurred to me somewhere along the line GSA in computing its formula, computing the allocations under the formula to nonintegrated users, in view of the fact that Jones Mills contract, I think in 1952, had to take into consideration the questions as to whether or not the hot metal that was produced by that plant came within the purview of that formula, as being a part of the metal that was allocable to nonintegrated users.

Mr. PIKE. Of course, another argument could be made against the application to molten metal in that for practical purposes there is only one user who can process that molten metal.

Mr. YATES. You mean two?

Mr. PIKE. From a particular plant built adjoining the facilities of General Motors.

Mr. YATES. What do you mean by adjoining? Do you mean within the limitations of carriage of molten metal by a thermos truck? We still didn't settle that question before this committee. We asked that question as to how far or how long metal would remain molten in a thermos truck. I never did get an answer. Somebody was supposed to furnish it. For all we know, molten metal can be transported from the Lister Hills plant to Birmingham, Ala., in a molten state and sold to anyone else. Apparently your information exceeds that which we have received.

Mr. PIKE. I have no information.

Mr. DALMAS. Mr. Chairman, we have to write a report some time so I hope you will pardon my apparent density on this 35 percent and what it consists of. I thought in making these contracts that the Government was interested in basic metal. That is what you were dealing with. Now when you say 35 percent, does that mean 35 percent of the basic production in the form of pig, ingot, or billet, or do you go on and figure that 35 percent clear on through the various fabricating operations? If you do, then you have that residue of scrap that has to be figured in there somewhere, and it would seem to me to get terribly complicated as to how you are going to eventually get that 35 percent figured out.

Mr. YATES. We are dealing with primary metal.

Mr. PIKE. Well, the clause relating to sales to nonintegrated users for the 15-year period merely provides that they shall offer a quantity of aluminum without specifying the form. The original contract says 25 percent. It is now 35 percent of the annual capacity of the additional facilities.

Mr. DALMAS. Which would be basic metal.

Mr. PIKE. Yes. We are talking about reduction facilities.

Mr. DALMAS. Would they be making pig or hot metal, as the case might be?

Mr. PIKE. Well, it would be production of the reduction facilities, the facilities covered by the contract and not the fabricating facilities.

Mr. DALMAS. That is right.

Mr. YATES. Does GSA have any mandate to protect small business in any of its legislation?

Mr. FLOETE. To protect what?

Mr. YATES. The interest of small business in any of its legislation.

Mr. FLOETE. Yes, I think it does; whether we have it or not, we try. Title VII of the Defense Production Act.

Mr. YATES. Yes, it requires you to protect the interest of small business.

Mr. DALMAS. Also, Mr. Chairman, I believe Public Law 152 of the 81st Congress, isn't that correct, the Federal Property and Services Act.

Mr. YATES. Should I ask you what GSA is doing to carry out that mandate?

Mr. FLOETE. Well, we are approaching it from various angles I know you are familiar with. I mean, the set-aside program, you know about that and that is still going on actively with us; we have developed the business service centers throughout the country and have made them, I am sure, much more valuable to small business. We have held various clinics in cooperation with the Small Business Administration. I think this recent order on procurement, which

will channel a large amount of additional work into labor-surplus areas, gives considerable amount of preference to small-business concerns in those areas as well as outside. I think that is a very good example. This task force study of procurement practice is another example.

Mr. YATES. Can you furnish a statement for the record? I think that would be better as to what your activities are to protect the rights of small business?

Mr. FLOETE. Yes.

(The statement referred to is as follows:)

STATEMENT AS TO GSA'S ACTIVITIES IN REGARD TO SMALL BUSINESS

GSA's assistance to small business during the first half of the current fiscal year is reflected in the fact that of the agency's purchases in excess of $25, approximately 50 percent of the dollar volume and 78 percent of the actions were awarded to these concerns.

One of the more significant ways in which GSA has been aiding business in general, and small business in particular, is through its 13 business service centers located principally at the headquarters of our regional offices.

Typical of the assistance and information provided by these centers are advice concerning Federal procurement and disposal policies and practices; information about current bidding documents, specifications, contract terms and conditions, contract-award data, and names and locations of Government procurement officials having responsibility for requirements and contracting. Guidance concerning methods by which new and improved products may be introduced into the Government supply system is also provided.

During the first half of the current fiscal year these service centers handled approximately 304,000 inquiries. In addition, GSA representatives and area managers in other cities throughout the country serve as focal points for receiving inquiries.

Efforts are made to stimulate increased participation of small-business firms in GSA procurement and disposal activities by regularly submitting pertinent information for inclusion in the Department of Commerce's daily synopsis of United States Government proposed procurement, sales, and contract awards. For the same purpose, GSA participates in the small business opportunity clinics held throughout the country by the Small Business Administration in cooperation with local chambers of commerce and similar organizations, as well as in those meetings sponsored by the Department of Defense. (Particular efforts are being made to assure the maximum assistance to businessmen in those clinics being held in areas of substantial labor surplus.) At all of these meetings businessmen are made aware of Government contract and subcontract opportunities and advised generally on the problems involved in doing business with the Government. Senior purchasing officials and trained service center personnel, as well as individuals from the GSA central office, participate in these clinics.

Purchasing policies designed to be of direct assistance to small business include, for example, the setting aside of certain procurements exclusively for competition among small firms. It is to be noted that in the first 9 months of the current fiscal year, procurements thus set aside exclusively for small business amounted to approximately $9,800,000. In order to make it possible for small firms to participate in even the largest procurements, bidders are permitted to submit bids on quantities less than total requirements. Additionally, in those cases where two or more equal low bids are received, a special preference is given to the small firm in determining how the award shall be made. Furthermore, in order to increase the possibility of small firms being able to sell their normal product to the Government, it is the GSA policy (to the maximum extent possible) to develop specifications in accordance with industry standards.

The Task Force for Review of Government Procurement Policies and Procedures is continuing its efforts to eliminate needless inconsistences in the procedures of various departments in the agency, to simplify present procurement procedures, and to remove any inequities which may be involved in them. Emphasis is being given to improvement which will simplify and speed up the Government's procurement and contract methods; thereby benefiting all business dealing with the Government and small business in particular.

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Substantial progress has been made particularly in the field of fiscal, financial, and accounting improvements in order to provide financial assistance to the small-business concerns handling Government contract work.

Of particular interest to this subcommittee are the following activities of GSA with regard to small business insofar as they pertain to the functions of the Defense Materials Service in the field of minerals and raw materials:

1. DOMESTIC PURCHASE PROGRAMS UNDER THE DEFENSE PRODUCTION ACT

These programs were established early in the Korean emergency to encourage and stimulate expansion of domestic production by small producers. The program now cover beryl, manganese, mercury, and mica. Purchase programs have already been completed for asbestos, columbium-tantalum and tungsten, as the original objectives have been reached.

Under these programs, the Government agrees to buy over a definite period of time at fixed prices, generally above the market price, the production offered which meets specifications. The terms and conditions of the programs have been designed to facilitate participation by small business. Participants are not obligated to make deliveries, and formal contracts are not required. Any person or firm desiring to participate has only to request participation, and a certificate of participation is granted. Payment is made following acceptance of each delivery. For some materials, such as mica, purchases are made at Government depots in producing areas, and for other materials shipments are accepted by the Government at the railhead nearest the producer.

The majority of the participants are small producers who in many cases would not be in production except for the encouragement offered by the Government. As evidence of interest in these programs, approximately 200 certificates of participation have been issued to producers of beryl, more than 1,500 for manganese (in carload lots), and more than 2,000 for mica.

2. DOMESTIC PURCHASE PROGRAMS UNDER PUBLIC LAW 733, 84TH CONGRESS

Similar purchase programs have been established under Public Law 733 for asbestos, columbium-tantalum, and acid-grade fluorspar. Tungsten was also covered by this legislation, but no more funds are available for the purchase of this material. These programs were established by the Congress to provide for continued purchases of asbestos, columbium-tantalum, and tungsten when the Defense Production Act purchase programs were completed and, also, for purchases of acid-grade fluorspar. The terms and conditions of these programs, generally, are similar to the Defense Production Act purchase programs, and most participants are small producers.

3. STOCKPILING UNDER THE STRATEGIC AND CRITICAL MATERIALS STOCKPILING ACT (PUBLIC LAW 520, 79TH CONG.)

A domestic purchase program has been established for chrome ore and concentrates under this act. Operations are similar to the other domestic purchase programs, and more than 100 certificates of particiption have been issued to small producers. Many of the other materials acquired for the stockpile are purchased from small business, including, at the present time, metallurgical-grade fluorspar and mica. Other stockpile programs which have assisted small business are the rotation programs for materials, such as rubber and cordage fibers, where many of the companies involved are small units. In addition, most of the contracts for services, such as inspection, casting, and maintenance operations, are made with small business.

Mr. YATES. I don't remember your Freeport contract. What did you do there to protect small business in referring to nickel? I remember the small-business people were writing to this committee to get our help in helping them get some nickel. Nickel may very well be in short supply at the same time aluminum is in short supply. What are we doing in that contract to protect the rights of small business? Did we do anything to protect the rights of nonintegrated producers?

Mr. PIKE. No, sir.

Mr. YATES. Should that be looked into, or is it too late there?

Mr. FLOETE. Well, that contract is made. In that sense, it is too late.

Mr. YATES. Do you agree there should be some type of allocation of the product of that plan where the Government has guaranteed taking the full output to provide for certain supply going to small business, or nonintegrated producers, a term which I don't like particularly now, in order to protect the rights of small business?

Mr. PIKE. There are very few integrated users of nickel in this country, Mr. Yates.

Mr. YATES. That is small business.

Mr. FLOETE. The nickel platers have had a dickens of a time up until 9 months ago.

Mr. YATES. That is right. Would you think it would be well for GSA to speak to the Freeport Co. in terms of seeking amendments to protect the rights of small business?

Mr. FLOETE. If we can figure a good, logical way to do it.

Mr. YATES. Will you consider it?

Mr. FLOETE. Yes.

Mr. PIKE. Mr. Yates, in that connection, Freeport Sulphur Co. has announced that, in the financing of the construction of the plants in Louisiana and Cuba, they have entered into arrangements with, I believe, six consumers of nickel, whereby those consumers have the right and, under certain circumstances, the obligation to purchase certain quantities of the nickel produced in the Freeport—or the Cuban American Nickel plant. Now, what those quantities are has not been announced.

Mr. YATES. Well, these are six big companies or small companies?

Mr. PIKE. The identity has not been made public.

Mr. FLOETE. Big.

Mr. YATES. Well, I am suggesting, perhaps, that GSA may want to talk to Freeport and find out whether there would be an amendment which would protect the rights of small-business people under the contract Freeport has with the Government. If Freeport says "No," that is one thing. It has been saying "No" regularly right along, haven't they? The record will show the Administrator nods his head in assent. [Laughter.]

I think at least effort should be made, because I can contemplate the time when nickel may be in short supply again, and I think the committee would like to be advised of the success or failure of your mission, if you can or if you would do so.

Mr. FLOETE. Off the record.

Mr. YATES. Yes.

(At this time there was off-the-record discussion.)

Mr. YATES. Mr. Floete, thank you very much.

Mr. SHEEHAN. One other question. Mr. Floete, when was this Freeport contract entered into?

Mr. FLOETE. March 8, 1957.

Mr. YATES. And it appears in the hearings of the independent offices appropriations hearings for GSA for earlier this year.

Thank you, Mr. Floete, it is always a pleasure to welcome you and your very able staff to any hearing of which I am a part, because we appreciate the full cooperation which you give us and the fine work that you are doing in your job. Thank you very much.

Mr. FLOETE. Thank you.

Mr. YATES. May we have the gentlemen from GAO who are here?

TESTIMONY OF MR. ROBERT F. KELLER, ASSISTANT TO THE COMPTROLLER GENERAL

Mr. YATES. Good morning, Mr. Keller. We welcome you and the other members of GAO. We know the hour is late. However, we would welcome your prepared testimony. I understand you have a prepared statement.

Mr. KELLER. Yes, sir. Very short, prepared statement. I am Robert F. Keller, assistant to the Comptroller General. On my right is Mr. Arthur Eaton, who is attached to our General Counsel's Office, and on my left is Mr. Phil Chavran, Assistant Director to CAAD.

By your letter of March 31, 1958, you requested us to appear before your subcommittee. We were advised that the subcommittee is specifically interested in receiving information on the future of the aluminum industry and the position of small business in that industry. Pursuant to our discussions with you and your staff, we were informed that you wished us to address ourselves to the question of what constituted the "published price" or "lowest published price," as those terms are used in the various contracts with domestic producers of aluminum.

The hearings held by Subcommittee No. 3 on Minerals and Raw Materials, House Small Business Committee, indicate that the domestic producers of aluminum holding contracts with the Government have offered to sell aluminum in Europe at prices less than their published United States prices. We have studied the facts brought out by the hearings, with a view toward determining whether any action legally and properly may be taken to obtain price reductions under the Government contracts with the domestic producers where they have offered aluminum in foreign countries at below their published price in the United States.

As a part of our study of the question, we obtained the views of the General Services Administration as to what the contracting parties meant by "lowest published price." Based upon their reply and our analysis of the legal principles applicable to the facts, we concluded that the term "lowest published price" was intended by the parties to the contracts to refer to the published price in the United States. A copy of our decision of May 6, 1958, is attached.

As a part of our regular audit coverage of the General Services Administration activities, we have followed the developments under the aluminum supply contracts and the actions taken by the agency in its administration of these contracts. We propose to continue our independent review of the transactions under these contracts in the discharge of our overall statutory audit responsibility.

In this connection, we have followed your subcommittee hearings on the aluminum industry, particularly that part relating to the administration of the aluminum supply contracts. While this Office has no special knowledge of the future of the aluminum industry and the position of small business in that industry, we, as an agent of of Congress, are prepared to assist your subcommittee in those areas where this Office is technically competent to do so.

As I stated, Mr. Chairman, attached to the statement is our letter to you of the Comptroller General of the United States, his letter to you of yesterday, on the published price.

Mr. YATES. Yes. The letter containing the opinion of the Comptroller General of the United States, dated May 6, 1958, No. B–132843, may be admitted in the record without objection. There is no need to read it.

(The letter of the Comptroller General of the United States No. B–132843, dated May 6, 1958, reads as follows:)

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, May 6, 1958.

B–132843.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3,
Select Committee on Small Business,
House of Representatives.

DEAR MR. CHAIRMAN: In accordance with your informal request at the meeting of March 31, 1958, there is set forth below our interpretation of the payment provisions of the supply contracts for the purchase of aluminum entered into between the General Services Administration and the Aluminum Company of America, the Kaiser Aluminum & Chemical Corp., the Reynolds Metals Co., and Harvey Aluminum (Inc).

The various contracts contain similar language which provides that any quantity of additional production from the additional facilities not disposed of and not otherwise sold or utilized by the contractor may be tendered to the Government in the form of pig only. The contracts also contain a clause entitled "Points and Terms of Delivery" which provides that contractor shall deliver aluminum to the Government at the delivery point within the continental United States specified in each order of the Government given pursuant to the terms of the contracts. The contract with the Aluminum Company of America provides in paragraph 2 of article XI as follows:

"The price at which the Government is required to buy aluminum pig on tender by the contractor, as detailed in paragraph 3 of article III, shall be the contractor's published price (including and subject to the standard terms and conditions applicable thereto) in effect at the time of delivery for the grade, form, size and quantity involved, provided, that if at the time of delivery the current published price (including and subject to the standard terms and conditions applicable thereto) for the grade, form, size and quantity involved of either Reynolds Metals Co. or Kaiser Aluminum & Chemical Corp. is lower than the contractor's published price, then, and during the period of such difference, the price at which the Government is required to buy aluminum pig tendered by the contractor as aforesaid shall be the lowest of such published prices in effect at the time of delivery. The contractor shall invoice the Government at its said published price in effect at the time of delivery and grant any credits required by the above formula in the contractor's first succeeding invoice after it becomes possible to compute such credits, which computation shall be promptly made."

The Kaiser Aluminum & Chemical Corp. contract provides in paragraph (a) of article XI as follows:

"The price at which aluminum pig and ingot shall be sold to the Government in accordance with article III (a) and (c) and article IV shall be contractor's lowest published price for the grade involved (including the terms and conditions applicable thereto) in effect at the time of delivery, provided, however, that if at the time of delivery the current published market price of either Aluminum Company of America or Reynolds Metals Co. is lower than contractor's published price, the price to the Government shall be the lower of: (*a*) the weighted average (as defined below) of the lowest current market prices so published of the 3 present producers' averages during the 90 days preceding the date of delivery; or (*b*) contractor's lowest published price in effect at the time of delivery for the corresponding grade of aluminum."

The payment clauses of the contracts with the Reynolds Metals Co. and Harvey Aluminum (Inc.) are similar to the provisions of the contract with Kaiser Aluminum & Chemical Corp., and will not be repeated here. The contracts are silent as to the meaning intended to be given the terms "published price," or "lowest published price."

The hearings held by Subcommittee No. 3 on Minerals and Raw Materials, House Small Business Committee, indicate that the Government contractors have offered to sell aluminum in Europe at prices less than their published United States prices. Inasmuch as the contracts with the Government do not expressly

limit the price at which the aluminum can be tendered to the United States to the "lowest published price" in the United States, question arises as to whether the lower price offered in Europe should be considered the contract price.

In response to our request for a report the General Services Administration advised us, in effect, that at the time the contracts were entered into it was the practice of each company to publish its prices by issuing printed pricelists containing not only prices but also certain terms and conditions applicable to such prices. That practice has been continued. They further reported that the contractor's published prices referred to in the contracts could mean only the printed pricelists issued by each company. The pricelists of each company provide that the company will make an allowance for transportation charges, including the applicable transportation tax, to destinations within the continental United States. In addition each list states the delivery point as being f. o. b. shipping point. The General Services Administration believes that the "shipping point" referred to means the producer's plant from which shipment of the primary aluminum is to be made. They also reported that the E. & M. J. Metal and Mineral Markets, a publication providing market information, began in 1956 to include a summary of average daily price quotations for aluminum in addition to the weekly quotations which had previously been the only quotations in that publication. In connection with the daily quotations the following note appears: "Aluminum quotations refer to primary pig, 99 percent, delivered to consumers. The United States primary producers, as well as the major exporter of aluminum to the United States, quote prices delivered to consumers in the United States." The General Services Administration states that they have no doubt that this note refers to the pricelists described above. Finally, the General Services Administration states that although the E. & M. J. Metal and Mineral Markets reports that certain of the domestic aluminum producers had entered spot bids in foreign countries at less than the published lists, in the absence of evidence showing substantial and continuing sales abroad, it does not believe that the prices used in those sales or bids can be considered to be "published prices" as that term is used in the aluminum supply contracts.

It is a rule of contract construction that the intent and meaning of a contract are not to be determined by the consideration of an isolated section or provisions thereof, but that the contract is to be considered in its entirety and each provision is to be construed in its relation to other provisions and in the light of the general purposes intended to be accomplished by the contracting parties (13 C. J. 525, 17 C. J. S. 707, and cases cited therein; *City of Harlan, Iowa* v. *Duncan Parking Meter Corp.*, 231 F. 2d 840; *O'Brien* v. *Miller*, 168 U. S. 287, 297; *United States* v. *P. J. O'Donnell & Sons, Inc.*, 228 F. 2d 162). The term "published price" standing by itself might create a doubt as to what the parties intended; but, applying the above principles, when that term is considered in conjunction with the delivery provisions of the contracts the intended meaning of such term seems to be apparent. The contracts call for delivery of the aluminum within the continental United States and it could only be delivered elsewhere in case of mutual agreement of the parties. Therefore, even if it were established that the prices at which the foreign offerings were made were published prices, it would be reasonable to assume that the term "published price" as used in the contracts could only have had reference to the United States published price. This is even more apparent when consideration is given to the fact that at the time the contracts were negotiated it was the practice of each company to publish price lists which quoted prices for aluminum f. o. b. producer's plant with an allowance for transportation charges, including the applicable transportation tax, to destinations within the continental United States.

Finally, there is for consideration the well-recognized rule of law that where a contract is not clear, the interpretation given it by the parties as shown by their acts is of substantial probative value in interpreting a contract (Williston on Contracts, vol. 3, sec. 623, p. 1792 and cases there cited). In the instant case, the parties to the contracts have clearly indicated by their actions that they regarded the contractors' published price for delivery in the United States as the price intended.

In view of the facts related above and the law applicable thereto we have no alternative but to conclude that the term "published price," as used in the contracts, means the contractors' published price for delivery at points within the United States.

Sincerely yours,

JOSEPH CAMPBELL,
Comptroller General of the United States.

Mr. YATES. I just want to ask one question as to whether or not GAO has considered the question as to the possibility of toll arrangements serving as a device to lower published price?

Mr. KELLER. Our decision relates to domestic published prices here versus foreign prices.

Mr. YATES. I wondered whether you had ever, in connection with your deliberations as to what is published price and the practice in the aluminum industry, as to whether or not——

Mr. KELLER (interposing). We have naturally considered those points but with no final conclusion. I would have some doubt in my mind whether a single deviation would be enough to say that the published price as contemplated in the contract is no longer applicable. They are so-called list prices. In answer to your question, I would have to say that we have arrived at no final conclusion and any conclusion would depend a great deal on the extent to which the practice is followed. We have heard about it but we have no affirmative——

Mr. YATES (interposing). Is it a function of GAO to look into these things to determine whether the interest of the Government is protected, or do you do so only on request of Congress or a committee thereof?

Mr. KELLER. I would answer your question this way, I think GAO has a duty to look into any type of transaction where the Government in the end is perhaps paying more money than it should. Now, whether we do it on our own initative or whether we do it at a request of this committee, I think becomes immaterial at that point.

Mr. YATES. Do you have any other questions?

Mr. SHEEHAN. No.

Mr. YATES. Gentlemen, thank you very much for appearing before us today.

Mr. KELLER. All right.

Mr. YATES. The committee will stand recessed subject to further call by the Chair.

(Whereupon, at 12:40 p. m., the committee recessed subject to further call by the Chair.)

APPENDIX

EXHIBIT 13.2

AGREEMENT

THIS AGREEMENT, dated this 23d day of July, 1952, between REYNOLDS METALS COMPANY, a Delaware corporation, with a place of business at Jones Mills, Arkansas (hereinafter called "Seller"), and GENERAL MOTORS CORPORATION, a Delaware corporation (hereinafter called "Buyer"),

WITNESSETH:

WHEREAS, the parties hereto entered into an agreement dated February 7, 1950, whereby the Seller agreed to sell and deliver molten aluminum alloy to Buyer, and Buyer agreed to purchase and receive such molten aluminum alloy at an experimental foundry at Jones Mills, Arkansas, to test the possibility of pouring aluminum castings from molten metal as taken from the pot lines of a reduction plant with the minimum handling and loss of heat; and

WHEREAS, on the basis of experiments conducted under the aforesaid agreement, the Buyer proposes to construct a permanent aluminum foundry in the vicinity of Seller's reduction plant at Jones Mills, Arkansas; and

WHEREAS, Buyer desires to purchase and receive virgin molten aluminum metal and alloys of same from Seller's reduction plant at Jones Mills, Arkansas, and Seller desires to sell and deliver such molten metal to Buyer;

NOW, THEREFORE, in consideration of the premises and the mutual promises herein contained, each promise being a separate consideration for each other promise contained in this agreement, it is agreed as follows:

I. QUANTITY

Seller shall manufacture, sell and deliver, and Buyer shall purchase and receive during the term of this Agreement, Buyer's requirements of virgin molten aluminum metal and alloys of same at its aluminum foundry in the vicinity of Jones Mills, Arkansas; provided, however, that such requirements shall not exceed the maximum quantity of the output of one pot line (approximately 110,000 pounds per day) of Seller's reduction plant at Jones Mills, Arkansas, at the prices and upon the terms and conditions provided herein.

II. SPECIFICATIONS

(a) The analysis of the alloyed molten metal to be supplied hereunder shall be certified by Seller and checked by Buyer to be:

Silicon	4.50 to 6.00%
Iron	50% Maximum
Aluminum	Balance

(b) Upon twenty-four (24) hours' notice from Buyer to Seller, in writing, if practical, or upon such further period of time as may be agreed to by the parties hereto (the parties hereby agreeing to negotiate in good faith concerning any extension of the said period), the above specification may be changed from time to time so as to increase or otherwise add to the various elements in the pot lines, excepting, however, magnesium which will be added by Buyer in its open hearth.

III. PRICE

The price of molten metal delivered hereunder at Seller's reduction plant located at Jones Mills, Arkansas shall be computed on the basis of the following formula:

(The list price of 99 plus pig, which is to be established on the basis of the Engineering and Mining Journal average for the month preceding the

month in which deliveries are made) less (the then current average freight cost factor included in the list price of 99 plus pig) less (10%) times (the percent of aluminum content) plus (the percentage of other elements multiplied by their respective market prices, which are to be established on the same basis as 99 plus pig).

Example of establishing price per pound of molten metal containing 95% Aluminum and 5% Silicon

	Per pound
(List price 99 Plus Pig)	$.1800
Less (Freight Factor)	.0113
	.1687
Less (10%)	.01687
	.15183
Times (95% aluminum content)	95%
	.14424
Plus (5% Silicon @ $.20 (market price))	.01000
Equals Molten Metal Delivered Price	.15424

IV. PAYMENT

Upon certification of quantities of molten metal received, payment shall be made by Buyer on Monday of each week covering all molten metal received through 5 o'clock p. m. of the preceding Thursday. Payment for aluminum pig delivered to General Motors Corporation in accordance with the provisions of Paragraph V hereof shall be made on the 10th and 25th prox.

V. DELIVERY AUTHORIZATIONS

The molten metal covered by this agreement shall be delivered by Seller at Seller's plant from its crucible into a receptacle furnished by Buyer as follows:

It is recognized that molten aluminum is produced by Seller under a continuous process, accordingly, Seller shall during the term of this agreement, unless otherwise notified by Buyer in writing at least seventy-two (72) hours in advance, be authorized to deliver and Buyer will accept molten aluminum in crucibles containing not less than 4,000 pounds, a minimum quantity of 50,000 pounds per day, including Saturdays, Sundays and holidays, commencing when notified in writing by Buyer to deliver the aforesaid quantities (the date of which notice shall be considered the effective date of this agreement for the purpose of Article VII hereof); provided, that, if at any time during the term of this agreement Buyer shall give Seller seventy-two (72) hours written notice of Buyer's inability to receive molten aluminum in the minimum quantities aforesaid, Seller shall convert said molten aluminum into pig and shall sell such pig to Buyer at Seller's standard list price and shipping terms for such pig prevailing at that time; provided, however, that Seller's list price for pig shall then be competitive with other producers of aluminum pig; and provided, further, that if at any time during the term of this agreement, Buyer is unable to accept delivery of molten aluminum and/or aluminum pig in the minimum quantities aforesaid because of a reduction in Buyer's total requirements of molten aluminum and aluminum pig to less than the minimum quantities aforesaid, Buyer may on ninety (90) days notice to Seller reduce the minimum quantities which Buyer is required to accept hereunder for the duration of such condition.

VI. DISPOSITION OF SPRUES, GATES AND RISERS

It is acknowledged by the parties hereto that a great quantity of sprues, gates and risers are accumulated in the process of making castings and such items must be remelted and pigged. Inasmuch as such scrap may contain contaminating elements, it is not entirely safe to mix them with alloyed pure metal and therefore they will be disposed of by Buyer.

VII. TERM

This Agreement shall be and remain in full force and effect on and after the effective date hereof until terminated by either party upon one (1) year's notice in writing to the other party; provided, however, that such notice of termination may not be given prior to four years from the effective date hereof.

VIII. PATENTS

(a) Seller guarantees that the material as set forth in paragraph II (a) hereof and its processing of such material to be delivered hereunder and subsequent sale of it will not infringe any United States or foreign Letters Patent, and the Seller agrees to defend, protect and save harmless Buyer, its successors, assigns, customers and users of its products, against all suits at law or in equity, and from all damages, claims and demands for actual or alleged infringement of any patent by reason of the Seller's processing and subsequent sale of the material to be delivered hereunder.

(b) If, in Seller's opinion, any request made by Buyer pursuant to Paragraph II (b) hereof for a change in specifications would result in or have the effect of causing Seller to infringe any United States or foreign letters patent, the Seller may refuse to make such changes unless Buyer agrees to defend, protect and save harmless Seller against all suits at law or in equity, and from all damages, claims and demands for actual or alleged infringement of any patent by reason of Seller's processing and subsequent sale of the material to meet such changed specifications.

IX. SERVICES PERFORMED BY THE PARTIES

If this contract requires the performance of services by either employees, agents and servants of Buyer on the premises of Seller, or by employees, agents and servants of Seller on the premises of Buyer, the Buyer or Seller, as the case may be, agrees to indemnify and protect the other party to this contract against all liabilities, claims or demands for injuries or damage to any person or property growing out of the performance of this contract by their servants, agents and employees of Buyer or Seller while on the premises of the other party. It is further agreed that said servants, agents and employees of either Buyer or Seller while in the performance of this contract on the premises of the other party will comply with the same rules and regulations of the party on whose premises they are then located to which the servants, agents and employees of the party on whose premises they are then located are subjected.

X. EXCUSABLE DELAYS

Neither party shall be liable to the other for failure to comply with any of its obligations hereunder when such failure is due to circumstances beyond the control of the party failing to comply, including, without being limited to, failures occasioned by Acts of God, strikes, lockouts, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, civil disturbances, explosions, breakage or accident to machinery or equipment, failure of usual sources of supply of material, gas, or electric power, or interference by or on the request of the state, county, municipal or Federal Government or any agent or agencies thereof. In the event that Seller is unable to provide molten metal to Buyer due to an excusable delay as defined above from Seller's Jones Mills, Arkansas plant, Seller agrees to use its best efforts to provide aluminum to Buyer's plant located at Jones Mills, Arkansas, from any of Seller's other plants.

XI. COMPLIANCE WITH LAWS

Seller agrees that the performance of this agreement is and shall be subject to all applicable Federal, State, or local laws, rules, regulations or ordinances.

XII. ASSIGNMENT

This agreement shall not be transferred or assigned by either party without the written consent of the other party.

XIII. GOVERNMENT CONTRACTS

If at any time the Buyer shall notify Seller that any of the molten metal to be purchased hereunder will be used by Buyer in the performance of Government contracts requiring the inclusion of specified conditions in subcontracts in addition to the conditions included herein, the Buyer and Seller shall negotiate a modification of this agreement to incorporate herein such additional conditions as may be required by the then current applicable Federal rules and regulations for inclusion in subcontracts under Government prime contracts.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed by their duly authorized officers as of the day and year first above written.

REYNOLDS METALS COMPANY,
By DAVID P. REYNOLDS,
Vice President.

FRED R. EDNEY,
Ass't Sec.

Attest:

GENERAL MOTORS CORPORATION,
By C. R. OSBORN,
Vice President.

Attest:

J. C. DAVIDSON,
Assistant Secretary.

AGREEMENT OF AMENDMENT

This Agreement of Amendment dated this 26th day of September 1955, between Reynolds Metals Company, a Delaware corporation, with a place of business at Jones Mills, Arkansas (hereinafter called "Seller") and General Motors Corporation, a Delaware corporation, with a place of business at Jones Mills, Arkansas (hereinafter called "Buyer");

WITNESSETH:

WHEREAS, the parties hereto have entered into an agreement which is dated July 23, 1952 which provides in substance that Buyer will purchase from Seller and Seller will sell to Buyer certain quantities of molten aluminum alloys at their Jones Mills, Arkansas Plants; and,

WHEREAS, the parties have found it to be desirable and necessary to amend the said contract;

NOW, THEREFORE, in consideration of the premises and the mutual promises herein contained, the parties agree:

1. That the said contract dated July 23, 1952 between the parties shall be amended in the following particulars, and only in those particulars.

2. That Paragraph II entitled "Specifications" of the said contract shall be omitted and in lieu thereof there shall be inserted the following:

"(a) The analysis of the alloyed molten metal to be supplied hereunder shall be certified by Seller and checked by Buyer to be as per specifications to be supplied from time to time by Buyer.

(b) Upon twenty-four (24) hours' notice from Buyer to Seller, in writing, if practical, or upon such further period of time as may be agreed to by the parties hereto (the parties hereby agreeing to negotiate in good faith concerning any extension of the said period), the specifications may be changed from time to time so as to increase or otherwise add to the various elements in the pot lines, excepting, however, magnesium which will be added by Buyer in its open hearth."

3. That Paragraph III entitled "Price" of the said contract shall be omitted and in lieu thereof shall be inserted the following:

"The price of molten metal delivered hereunder at Seller's reduction plant located at Jones Mills, Arkansas shall be computed on the basis of the following formula:

(The list price of 99 plus pig, which is to be established on the basis of the American Metal Market average for the month preceding the month in which deliveries are made) less (the average freight cost to Seller of all shipments of aluminum pig during the calendar quarter preceding the quarter in which deliveries are made; such average freight costs shall be computed by using all shipments of pig by Seller, including shipments be-

tween Seller's plants and shipments to others, except for shipments or transfers between Seller's plants on which Seller incurs no freight costs. Computations shall be made at the end of each calendar quarter. No change will be made in freight allowance unless quarterly computations show a change of at least .05 cents per pound in average freight costs from that being used and then, in that event, a change in allowance will be made equivalent to the change in average freight costs. Changes, if any, shall become effective one month following the end of the quarterly computation. For instance, if a computation at the end of March shows that the freight allowance should be changed, the change will become effective on the first of May) less (10% multiplied by the aluminum content) plus (the percentage of other elements multiplied by their respective market prices which are to be established on the same basis as 99 plus pig with the exception of copper. Copper shall be included at average cost to Seller of copper for alloying purposes at its Jones Mills Plant during the preceding month.)"

4. That Article IV entitled "Payment" of the said contract shall be omitted and in lieu thereof shall be inserted the following:

"At the close of business each Wednesday (which is defined to be Thursday at 8:00 a. m.), Seller shall prepare an invoice to cover the molten metal delivered during the preceding week, except on month ends not falling on Wednesday. Then there will be two invoices rendered for payment; one covering the remaining days in the month from the preceding Wednesday (as defined), and the other covering the necessary days in the new month to complete a week's billing.

Upon certification of quantities of molten metal received, payment shall be made by Buyer within ten (10) days of receipt of invoice covering the preceding week's deliveries.

Payment for aluminum pig delivered to Buyer in accordance with the provisions of Paragraph V hereof shall be made on the 10th and 25th prox."

5. That Paragraph V entitled "Delivery Authorizations" of the said contract shall be amended by adding the following paragraph thereto:

"Buyer shall furnish Seller with a written sixty-day schedule of aluminum requirements on the eighth day of each month preceding the month of delivery. The first thirty (30) days set forth in such schedule shall be considered a firm schedule, and the second thirty (30) days will be a forecast of estimated requirements which will be made firm on the eighth day of the following month. Seller shall have a period from the eighth of each month until the first day of the subsequent month to commence deliveries of that quantity of molten aluminum as set forth by notice from Buyer."

6. That inasmuch as Paragraph V entitled "Delivery Authorizations" of the said contract states that the effective date of the contract for the purposes of Article VII of the said contract shall be the first date upon which Buyer gives notice to Seller to commence deliveries, the parties agree that it is desirable to set the effective date. Therefore, the parties have agreed that for the purposes of Paragraph VII entitled "Term" of the said contract, and for all other purposes, the effective date shall be considered January 1, 1954.

7. That inasmuch as General Motors has formerly raised some question concerning the meaning of the term "Buyer" as that word is used in the said contract, and particularly as it is used in Paragraph V thereof, the parties agree that it means General Motors Corporation as a whole and is not limited to any particular plant or division thereof.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed by their duly authorized officers as of the day and year first above written.

REYNOLDS METALS COMPANY
By DAVID P. REYNOLDS,

Attest:

FRED R. EDNEY,
Assistant Secretary.

Attest:

GENERAL MOTORS CORPORATION
By C. R. OSBORN,
Vice President.

J. C. DAVIDSON,
Assistant Secretary.

EXHIBIT 13.24 (E)

THIS AGREEMENT

made this thirteenth day of February, 1957, by and between GENERAL MOTORS CORPORATION, a Delaware corporation having a principal place of business at 3044 West Grand Boulevard, Detroit, Michigan, hereinafter called General Motors, and REYNOLDS METALS COMPANY, a Delaware corporation having a principal place of business at 2500 South Third Street, Louisville, Kentucky, hereinafter called Reynolds.

WITNESSETH:

WHEREAS Reynolds contemplates the erection of a new aluminum reduction plant on land now under option to Reynolds in the vicinity of Massena, New York, to be operated by electricity generated at the new Barnhart Island station now being built by the State of New York; and

WHEREAS Reynolds desires to sell to and General Motors desires to buy a portion of the output of such plant, primarily in the molten state; and

WHEREAS the land which as aforesaid Reynolds has under option is in excess of Reynolds' requirements, and in order to make economical use of molten metal it will be necessary for General Motors to have a foundry in the general vicinity of Reynolds' new aluminum reduction plant; and

WHEREAS the parties are simultaneously with the negotiation of this contract negotiating a separate contract for the purchase by General Motors of a portion of the aforesaid land to be used as a site for a new aluminum foundry to be erected by General Motors;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants contained herein,

IT IS AGREED, subject to receipt by Reynolds of a satisfactory long-term contract for the purchase of power from the State of New York and to the execution of a sale by Reynolds to General Motors of part of Reynolds' lands near Massena, New York:

1. Reynolds will proceed as rapidly as possible with the erection of a new aluminum reduction plant on lands under option to Reynolds in the vicinity of Massena, New York, to the end that such plant shall be able to supply General Motors' requirements as hereinafter defined no later than May 1, 1959.

2. General Motors will proceed as rapidly as possible with the erection of a new aluminum foundry on lands to be purchased from Reynolds in the aforesaid tract, to the end that such plant shall be in operation no later than June 1, 1959.

3. From June 1, 1958, until Reynolds can deliver molten metal Reynolds will sell and General Motors will buy for its Massena foundry such quantities of aluminum and aluminum alloy in pig form as General Motors may require for the operation of the aforesaid foundry, at prices established as hereinafter provided for pig.

4. Commencing as soon as power becomes available to Reynolds as aforesaid, and continuing for the full term of this Agreement Reynolds shall manufacture, sell and deliver at its Massena plant and General Motors shall purchase and receive at its Massena foundry the entire requirements (for casting, pigging, or otherwise) of such foundry for virgin aluminum and aluminum alloys, subject to a maximum of 75,000,000 pounds a year. General Motors will place with such foundry one half of the requirements of its Chevrolet Division for aluminum and aluminum alloy castings for automatic transmission parts and one quarter of such requirements for pistons. Requirements are net after re-use of any scrap which may be generated in Chevrolet plants. General Motors will not increase its requirements against such foundry (except for increases resulting from changes in sales volume) except upon one year's written notice to Reynolds, unless Reynolds in any case agrees to accept shorter notice. Such notice will designate the parts and the percentage of Chevrolet's total requirements therefor to be made at the foundry, which percentage will not thereafter be reduced.

General Motors may similarly increase requirements beyond 75,000,000 pounds a year on three years' written notice to Reynolds, except that no such increase may be for anticipated requirements of less than 50,000,000 pounds a year; and provided that Reynolds shall be able to obtain satisfactory financing and adequate power at satisfactory rates.

5. Specifications (including temperatures) shall be as from time to time prescribed by General Motors upon such notice as may be reasonably required

to enable Reynolds to obtain alloying elements and introduce them into its pot lines. General Motors will not prescribe an alloy or temperature which is impracticable to produce in Reynolds' pot line. Any metal not conforming to specifications shall be returned to Reynolds (who shall reimburse General Motors for transportation costs) and treated as not having been delivered.

6. The price of each delivery of molten metal hereunder shall be computed according to the following formula: the aluminum content at: the average list price of 99% aluminum pig quoted in American Metal Market during the preceding calendar month; less the average freight cost to Reynolds of all shipments (including interplant shipments) of pig during the preceding calendar quarter, excluding from the computation those shipments on which Reynolds incurs no freight costs, except that no change in freight allowance shall be made until one month after the end of each calendar quarter and then only if such change would amount to at least $0.0005 a pound; less ten per cent of the amount remaining after deducting the freight allowance; the alloying elements at market prices determined as hereinabove prescribed for aluminum pig, except that copper and ferro-manganese shall be priced at its average cost to Reynolds at its Massena plant during the preceding month. Reynolds shall not use premium price copper or ferro-manganese without first affording General Motors an opportunity to locate copper or ferro-manganese at a lower premium or at no premium.

7. Reynolds shall invoice for molten metal delivered hereunder no less than one nor more than five times a calendar month, with one invoice covering all deliveries through the end of the month (hereby defined to include to 8 a. m. of the next day) and not theretofore invoiced. General Motors shall pay all agreed invoices received between the first and fifteenth days of any month on or before the twenty-fifth of such month, and received between the sixteenth and last days on or before the tenth of the following month.

8. No later than the eighth day of each month commencing with the first month preceding the month in which Reynolds expects power to become available General Motors shall furnish Reynolds with a schedule of molten metal requirements by days for the next two calendar months, of which the schedule for the first month shall be firm and that for the second month estimated. Such schedules will provide for as near as may be uniform daily quantities including Saturdays, Sundays and holidays. Reynolds will deliver according to such schedules in receptacles of at least four thousand pounds capacity, of which General Motors shall furnish an adequate supply. Title and risk shall pass to General Motors upon delivery to General Motors' receptacles at Reynolds' plant. General Motors shall move the receptacles from Reynolds' plant, for which purpose Reynolds shall provide any ramps, loading spaces, roadways and similar facilities on its property reasonably required to facilitate such removal.

9. In the event that General Motors shall have specified unalloyed aluminum, General Motors may provide in the aforesaid schedules that such aluminum shall not be delivered on days when because of Saturdays, Sundays or holidays it could not be promptly used. In the case of alloys, the schedules may similarly omit such "weekend metal" to the extent that General Motors buys corresponding quantities of pig of the same alloys, or that Reynolds with its best efforts is able to dispose of such metal to other customers.

10. The price of each shipment of pig hereunder shall be the list price as quoted at the time of shipment in American Metal Market for aluminum and for any aluminum alloy so quoted, and for aluminum alloys not so quoted shall be the list price of the quoted alloy most closely resembling the alloy supplied, varied by adding thereto or subtracting therefrom the cost of the respective differences in alloying elements as determined from quotations for such elements in American Metal Market; but no higher than Reynolds' lowest current prices for the same.

11. This Agreement shall be and remain in full force and effect from the date hereof until May 31, 1964, subject to renewal at the option of General Motors for an additional five years to be exercised by notice in writing to be delivered no later than May 31, 1963, and thereafter until terminated by either party upon one year's written notice.

12. Reynolds warrants that the material which it will supply hereunder, and its processing, sale and use will not infringe any United States or foreign patent, and agrees to defend, protect and save harmless General Motors, its successors, assigns, customers and users of its products, against all suits at law or in equity, and from all damages, claims and demands for actual or alleged infringement of any patent by reason of Reynolds' processing and sale of such material; provided, however, that if, in Reynolds' opinion, any specification prescribed by

General Motors would result in or have the effect of causing Reynolds to infringe any United States or foreign patent, Reynolds may refuse to manufacture to such specification unless General Motors similarly indemnifies Reynolds.

13. If this contract requires the performance of services by employes, agents or representatives of General Motors upon premises of Reynolds, or by employes, agents or representatives of Reynolds upon premises of General Motors, General Motors or Reynolds, respectively, shall indemnify and protect the party upon whose premises such services are performed against all liabilities, claims or demands for injury or damage to any person or property by reason of the presence of any such employe, agent or representative while on the premises of the other party in connection with this contract. The employes, agents and representatives of either party while on the premises of the other shall comply with all rules to which the employes, agents and representatives of the owner of the premises are subject.

14. Neither party shall be liable to the other for failure to comply with any of its obligations hereunder when such failure is attributable to circumstances beyond the control of the party failing to comply, including, without being limited to, failures occasioned by acts of God, strikes, lockouts, differences with workmen, armed interference, civil disturbances, fires, explosions, breakage of or accident to machinery or equipment, failure of usual sources of supply of materials, fuel, power or transportation, or interference by or on the request of any government or agency thereof. In the event that Reynolds shall for any reason be unable to supply molten metal from its Massena plant, Reynolds undertakes to use its best efforts to provide aluminum and aluminum alloy to General Motors' Massena foundry from any of Reynolds' other plants. Aluminum and aluminum alloy supplied to General Motors pursuant to any governmental allocation order shall not constitute deliveries under this contract. In the event that either party shall suffer an impairment of its capacity to produce or consume, respectively, by reason of any of the foregoing, this contract shall apply to the remainder of production or requirements, as the case may be, in the same proportion that it would apply to full production or requirements in the absence of such interference.

15. Neither party may assign this Agreement without the consent of the other, except pursuant to a merger or other corporate reorganization involving substantially all the assets of the party. Reynolds will not sell, abandon or cease to operate its Massena plant without there having been made arrangements satisfactory to General Motors for continuance of a supply of molten metal to its Massena plant.

16. If at any time General Motors shall notify Reynolds that any of the aluminum and aluminum alloy to be purchased hereunder will be used by General Motors in the performance of government contracts requiring the inclusion of specified conditions in subcontracts in addition to the conditions included herein, the parties shall negotiate a modification of this Agreement to incorporate herein such additional conditions.

17. All notices hereunder from one party to the other shall be addressed as follows: By Reynolds to General Motors at the address to be established for its Massena foundry; and by General Motors to Reynolds at its Massena reduction plant; except that prior to June 1, 1959, all notices shall be addressed to the principal places of business hereinabove described.

18. Since this contract is wholly to be performed within the State of New York, it shall be interpreted, governed and construed according to the laws of that State,

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their officers thereunto duly authorized and their corporate seals to be affixed as of the day and year first above written.

(CORPORATE SEAL)

GENERAL MOTORS CORPORATION
By H. H. CURTICE,
President.

J. C. DAVIDSON,
Assistant Secretary.

Attest:

REYNOLDS METALS COMPANY
By DAVID P. REYNOLDS,
Vice President.

Attest:

FRED R. EDNEY,
Assistant Secretary.

AGREEMENT

THIS AGREEMENT made and entered into this 7th day of November, 1955, by and between REYNOLDS METALS COMPANY, a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Richmond, Virginia (hereinafter referred to as "Reynolds"), and FORD MOTOR COMPANY, a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Dearborn, Michigan, (hereinafter referred to as "Ford");

WITNESSETH:

WHEREAS Ford and Reynolds are seeking to develop new uses and applications for aluminum in the automotive industry; and

WHEREAS Ford desires to purchase and receive from Reynolds, and Reynolds desires to sell and deliver to Ford, virgin aluminum alloys in molten form (hereinafter referred to as "molten metal") to be used by Ford in the production of metal articles; and

WHEREAS it is contemplated that Reynolds will construct a plant in Kentucky at which molten metal to be sold to Ford hereunder will be produced (hereinafter referred to as the "Kentucky Reduction Plant") and it is contemplated that Ford, in order to assure itself of a future supply of aluminum castings, will construct a plant in Kentucky at which molten metal purchased by Ford hereunder will be used (hereinafter referred to as "Ford's aluminum plant"), such plant to be located adjacent to the Kentucky Reduction Plant in order to make possible the use by Ford of molten metal in place of aluminum pigs; and

WHEREAS Ford desires to enter into this Agreement in order to assure itself of a future supply of molten metal for use in Ford's aluminum plant, and Reynolds desires to enter into this Agreement in order to assure itself of an outlet for a portion of the capacity of the Kentucky Reduction Plant; and

WHEREAS Ford also desires to purchase and receive from Reynolds, and Reynolds also desires to sell and deliver to Ford, aluminum products and fabricated products, as hereinafter defined, in order to facilitate the development of such new uses and applications:

NOW, THEREFORE, in consideration of the premises and the mutual promises herein contained, each promise being a separate consideration for the other promises herein contained, each of the parties hereto agrees as follows:

1. *Sale of Metal.* Reynolds shall sell to Ford, and Ford shall purchase from Reynolds, molten metal in the quantity specified in this Agreement at the prices and upon and subject to the terms and conditions provided herein.

2. *Quantity.* (a) Subject to the provisions of Paragraph 7 (a) hereof, the yearly quantity of molten metal to be sold by Reynolds and purchased by Ford hereunder shall be 64,000,000 pounds during each full calendar year included in the delivery period of this Agreement; provided, however, that the amount of molten metal to be sold by Reynolds and purchased by Ford hereunder shall not be in excess of the reasonably anticipated requirements of Ford, determined by Ford from time to time, for aluminum alloys at Ford's aluminum plant for use in the production of metal articles.

(b) The yearly quantity of molten metal specified in subparagraph (a) above shall be prorated with respect to any partial calendar years included in the delivery period.

(c) In the event such reasonably anticipated requirements of Ford are less than the yearly quantity provided for in subparagraph (a) above during any calendar year included in the delivery period of this Agreement, Reynolds shall sell to Ford, and Ford shall purchase from Reynolds, during such year a quantity of aluminum pig equal to the difference between such reasonably anticipated requirements and such yearly quantity; provided, however, that Reynolds, if so requested by Ford, shall sell the surplus aluminum in the form of aluminum pig to any person (including Ford's other plants) designated by Ford; and provided further, that Reynolds, in addition, if so requested by Ford, agrees, in good faith, to assist Ford in the sale of the surplus aluminum in the form of aluminum pig to other persons. Aluminum pig sold by Reynolds pursuant to this subparagraph to other persons (including Ford's other plants) shall be applied against the quantities of molten metal that Ford is obligated to purchase from Reynolds under this Agreement, and such aluminum pig shall be chargeable to Ford at the price and upon the terms specified herein for aluminum pig sold to Ford hereunder, but shall be delivered to other purchasers by Reynolds at the price and to the destination designated by Ford.

Anything to the contrary herein, notwithstanding, this subparagraph shall not be construed so as to require Reynolds to sell any part of the aluminum pig that

Ford is obligated to purchase from Reynolds hereunder to Reynolds' regular or current customers.

(d) Ford may at its option from time to time during the term of this Agreement increase the yearly quantity specified in subparagraph (a) above by giving written notice to Reynolds at least 36 months prior to the effective date of each such increase; provided, however, that all increases to be made hereunder shall be in units of 50,000,000 pounds per year each and the yearly quantity specified in subparagraph (a) above shall not be increased to an amount greater than 164,000,000 pounds. Any increase in units of different increments from 50,000,000 pounds per year requested by Ford shall be granted or denied in the absolute discretion of Reynolds. If such yearly quantity is increased pursuant to a request by Ford, the quantity of molten metal and aluminum pig to be sold by Reynolds and purchased by Ford hereunder shall be increased accordingly; provided, however, that Reynolds' and Ford's obligations with respect to the increase in such yearly quantity at Ford's request as aforesaid shall be contingent upon and subject to the condition precedent of Reynolds' ability to borrow (on terms satisfactory to creditors of Reynolds as to whom Reynolds is committed at the time of such borrowing to obtain approval of such borrowing) necessary funds, as of the time when such funds are needed, for the construction of the necessary facilities to produce the amount of aluminum by which such yearly quantity is increased, together with any necessary related facilities and working capital requirements. Reynolds shall, promptly after receipt of Ford's request to increase such yearly quantity, use its best efforts to attempt to borrow such necessary funds for the purpose of financing the increased production capacity. If Reynolds is unable so to arrange for such financing on such satisfactory terms within 6 months after receipt of Ford's request, it shall so notify Ford within 30 days after expiration of such 6-month period and upon the giving of such notice the obligations of the parties with respect to the increase in such yearly quantity previously requested by Ford shall terminate in full. If such written notice is not given within the time aforesaid (or any extension thereof established by mutual agreement between Ford and Reynolds) the condition precedent to the obligations of the parties with respect to the previously requested increase in such yearly quantity thereby shall be deemed waived, and Reynolds shall be obligated to sell and Ford shall be obligated to purchase the increased yearly quantity.

3. *Specifications.* (a) Reynolds warrants that the analysis of the molten metal to be supplied to Ford hereunder, and the analysis of aluminum pig supplied under Paragraph 2 (c) above, shall conform to one of the following specifications as designated by Ford:

I

Silicon	7.5% to 9.5%
Copper	3% to 4%
Iron	.5% maximum
Any Others (except aluminum)	Traces (maximum)
Aluminum	Balance

II

Silicon	11% to 13%
Iron	.5% maximum
Any Others (except aluminum)	Traces (maximum)
Aluminum	Balance

III

Silicon	8.5% to 10.5%
Copper	2% to 4%
Iron	.5% maximum
Any Others (except aluminum)	Traces (maximum)
Aluminum	Balance

Reynolds, if so directed by Ford from time to time, shall supply more than one such alloy simultaneously in such proportions of the aggregate yearly quantity set forth in Paragraph 2 (a) above as Ford may specify.

Reynolds warrants also that the temperature of the stream of molten metal at the time of pouring into Ford's receptacles shall be not lower than 100° Centigrade above the melting point of the metal.

(b) In case any of the molten metal to be supplied hereunder, or any of the aluminum pig supplied under Paragraph 2 (c) above, does not conform to such specifications (or such minimum temperature requirement in the case of molten

metal), Ford shall have the right to reject and return or to retain and correct such molten metal or aluminum pig. Rejected molten metal or aluminum pig will be returned to Reynolds at Reynolds' risk for credit, and Reynolds shall pay Ford for all handling, transportation and other expenses incurred in connection with the rejected molten metal or aluminum pig. Reynolds shall pay Ford for expenses incurred in correcting defective molten metal or aluminum pig.

(c) Upon two weeks' advance written notice from Ford to Reynolds, the above specifications for one or more such alloys may be changed from time to time so as to increase, decrease or otherwise add to the various elements (practicable for alloying in the aluminum process) and percentages thereof; provided, however, that Reynolds shall not be required to increase the percentage of aluminum beyond 99.30% nor to decrease the percentage of iron to less than .30% nor to eliminate or reduce the trace elements ordinarily resulting from normal commercial production of the material, nor to add any magnesium or any material that is not practicable for addition to the material in Reynolds' reduction pots. If it would not be practical to change the specifications as requested within the time limit provided by the notice, the parties shall in good faith discuss and extend the notice period by mutual agreement in each instance so that the specifications will be changed at the earliest practical time. Reynolds shall not be required to change the specifications of any portion of metal quantity actually in the pots unless Reynolds consents to do so. In changing from one specification to another the precise percentages of the various elements will vary, and Ford shall purchase the material produced during such transition periods even though such material does not conform to either the previous or the changed specifications and the provisions of subparagraph 3 (b) above shall not apply with respect to the material produced during such transition periods; provided, however, that Ford shall be required to purchase such material (and the provisions of such subparagraph shall not apply) only if the variation in the percentage of the various elements results solely from the transition in the aluminum process from one specification to another.

4. *Price.* (a) The price, f. o. b. (Ford's receptacles) at the Kentucky Reduction Plant, of molten metal delivered hereunder shall be computed in accordance with the following formula:

(i) List Price of 99 Plus Pig (The List Price of 99 Plus Pig per pound shall be the average such price for delivery to customer's destination, for the month preceding the month in which deliveries of molten metal are made, as quoted in the American Metal Market, or as quoted in a comparable trade publication in the event quotations in the American Metal Market cease to be available; provided, however, that if at any time such quoted price exceeds the generally prevailing market price of 99 Plus Pig delivered at the Kentucky Reduction Plant, (or if such price ceases to be quoted in the American Metal Market and all comparable trade publications) such market price shall be used in computing the price of molten metal delivered hereunder for so long as it is less than such quoted price (or for so long as such price ceases so to be quoted)); minus

(ii) Freight Factor (The Freight Factor shall be the average freight cost per pound incurred by Reynolds with respect to all shipments and deliveries of aluminum pig during the calendar quarter preceding the quarter in which deliveries of molten metal are made; such average freight cost shall be computed quarterly, using all shipments and deliveries of aluminum pig by Reynolds, including shipments and deliveries between Reynolds' plants (except for deliveries between Reynolds' plants on which no freight cost is incurred) and shipments and deliveries to all other parties and including the aluminum pig delivered to Ford under this Agreement, during such quarter. No change shall be made in the Freight Factor then currently being used unless such quarterly computation shows a change of at least $0.0005 per pound (or unless such quarterly computation, when added to a quarterly computation for a prior quarter that was not adjusted for, shows a change of at least $0.0005 per pound) in average freight cost from that which was used to establish the Freight Factor then being used, but in the event of such a change of at least $0.0005 per pound, the Freight Factor shall be adjusted for subsequent deliveries of molten metal to reflect the full amount of such change in such average freight cost (such change to be effective on the first day of the second month of the quarter following the quarter with respect to which the adjustment is computed) and, as so adjusted, shall continue in effect until the effec-

tive date of the next subsequent change of at least $0.0005 per pound in such average freight cost, and so on with such quarterly computations and adjustments being continued in the same manner through the term of this Agreement); minus

(iii) Ten Percent (10%) of the remainder left after subtracting (ii) above from (i) above; multiplied by

(iv) Percentage of Aluminum Content (The dollar amount determined by the computations in (i), (ii) and (iii) above shall be reduced to a percentage thereof equivalent to the percentage of aluminum content contained in the molten metal involved by multiplying such amount by such percentage of aluminum content): plus

(v) Cost of Other Elements (The Cost of Other Elements) contained in a pound of molten metal shall be determined by multiplying the respective percentages of all other elements (other than aluminum) contained in such pound of molten metal involved by the actual average cost per pound to Reynolds of such material delivered at the Kentucky Reduction Plant for alloying purposes during the last full calendar month preceding the month in which delivery is made of the molten metal involved; provided, however, that Reynolds shall purchase such other elements from such sources, in such quantities, and in such forms as to obtain the lowest price reasonably possible; and provided further, that the quantity of trace elements and iron contained in the molten metal as a result of routine production operations (as distinguished from any quantity of such elements that might be added for alloying purposes) shall be disregarded in determining the "Cost of Other Elements" and shall be considered as included in and a part of the percentage of aluminum contained in the molten metal. The total amount of the cost of all other elements as determined herein shall be added to the amount resulting from the computations under (i), (ii), (iii) and (iv) above and the result of such addition shall be the price per pound of the molten metal delivered hereunder.

Example using hypothetical figures of determining price per pound of molten metal containing only 89% aluminum (including trace elements and iron) and 11% silicon:

	Per lb.
(i) List Price 99 Plus Pig	$0.225000
minus (ii) Freight Factor	0.007655
	0.217345
minus (iii) 10%	0.021735
	0.195610
multiplied by (iv) Percentage of	89%
Aluminum content	0.174093
plus (v) cost of Silicon (11% of $0.178525 market price per lb.)	0.019638
Equals Molten Metal Delivered Price	0.193731

(b) The price of aluminum pig purchased by Ford hereunder shall be Reynolds' standard list price (and shipping and delivery terms and freight allowances) prevailing at the time of each respective delivery of aluminum pig for the aluminum or aluminum alloy pig involved; provided, however, that such price shall not exceed the generally prevailing market price of comparable aluminum pig.

5. *Payment.* Invoices received by Ford after the last day of each month and prior to the 16th day of the following month covering molten metal and aluminum pig purchased by Ford hereunder shall be paid on or before the last day of such following month. Invoices received by Ford after the 15th day of each month and prior to the first day of the following month covering molten metal and aluminum pig purchased by Ford hereunder shall be paid on or before the 15th day of such following month. Such invoices shall contain such information and supporting data as Ford may specify from time to time. Reynolds may present such invoices to Ford and receive payment as above provided on the basis of the last previously computed price for the material delivered, but whenever under the terms of this Agreement such invoiced price

should have been recomputed and adjusted with respect to such deliveries (except for price adjustments pursuant to Paragraph 4 (a) (ii) hereof) Reynolds shall, within 60 days after each such delivery, present an adjustment invoice to correct such prices to the amounts specified by this Agreement. Amounts, if any, due to Reynolds under such adjustment invoices shall be paid by Ford within 15 days after receipt of the adjustment invoice. Amounts, if any, due to Ford under such adjustment invoices shall be paid by Reynolds or credited to Ford's account at the time of presentation of the adjustment invoice.

6. *Delivery Point.* The molten metal shall be delivered to Ford at the Kentucky Reduction Plant by pouring the same from Reynolds' crucibles into receptacles furnished by Ford, which shall be capable of holding not less than 4,000 pounds each of molten metal, and by placing such receptacles on vehicles provided by Ford. Ford shall provide Reynolds with sufficient receptacles to receive the molten metal at the delivery rate specified in this Agreement, such receptacles to be made available by Ford at points designated by Reynolds accessible to Reynolds' pot room cranes and/or handling equipment. Receptacles shall be filled promptly by Reynolds. Filled receptacles shall be loaded promptly by Reynolds on vehicles provided by Ford, which vehicles shall be removed promptly by Ford. Title to the molten metal shall pass from Reynolds to Ford at the point and time of pouring the same into Ford's receptacles.

7. *Delivery Period.* The delivery period under this Agreement with respect to molten metal shall commence on September 1, 1957, and continue thereafter throughout the term of this Agreement; provided, however, that:

(a) The aggregate yearly quantity of molten metal specified in Paragraph 2 (a) above shall, with respect to any period covered by the delivery period prior to September 1, 1958, be reduced by 25% thereof; and

(b) If for any reason the Kentucky Reduction Plant is not, at the commencement of the delivery period, ready and capable of production of the yearly quantity of molten metal specified in Paragraph 2 (a) above minus 25% thereof, then Reynolds, if so requested by Ford, shall supply the remaining portion of such reduced yearly quantity in the form of aluminum pig from some of its other aluminum reduction plants (at the price and on the terms specified in Paragraph 4 (b) above). Aluminum pig supplied by Reynolds from such other plants shall be applied against the quantity of molten metal that Ford is obligated to purchase from Reynolds under Paragraph 2 above and subparagraph (a) above.

8. *Delivery Rate.* (a) It is contemplated that molten metal sold by Reynolds and purchased by Ford hereunder will normally be produced in an assigned portion of the Kentucky Reduction Plant in order (i) to avoid contamination that otherwise might result in the pots and (ii) to enable Reynolds to accomplish alloying to Ford's specifications in the pots. Such assigned portion of the plant will operate on a continuous basis.

(b) Therefore, subject to the provisions of Paragraph 12 hereof, Ford shall accept deliveries of molten metal hereunder each and every day during the delivery period, including Saturdays, Sundays and holidays, on a 24-hour basis, at the times during the days and in the quantities as determined by Reynolds in its discretion; provided, however, that the maximum daily quantity to be delivered shall not be greater than an amount computed on the basis of the aggregate yearly quantity applicable at time of delivery divided by the number of days in the respective delivery year, plus 2% of such daily amount; provided, further, that the minimum daily quantity to be delivered shall not be less than an amount so computed (not including such 2% additive amount), minus 2% of such daily amount. Daily delivery for any partial calendar year in the delivery period shall be computed in like manner in respect to the number of days in that partial calendar year. The daily percentage tolerances of 2% shall not be deemed to increase or decrease the aggregate yearly quantity specified in Paragraphs 2 and 7 above. If Ford, by at least 72 hours' written notice, notifies Reynolds that it does not desire to receive as molten metal the total amount to be delivered on any day or days, the quantity of molten metal shall be reduced *pro tanto* and the amount of aluminum pig shall be correspondingly increased pursuant to Paragraph 2 (c) and other applicable provisions of this Agreement.

9. *Patents.* (a) Reynolds guarantees that the sale to Ford of molten metal and aluminum pig conforming in the case of each such different material with the specifications set forth in Paragraph 3 (a) hereof or Reynolds' processing

of either such material will not infringe any United States Letters Patent and Reynolds agrees to defend, protect and save harmless Ford, its successors and assigns, from all damages for actual or alleged infringement of any patent by reason of Reynolds' processing and subsequent sale of either such material to be delivered hereunder.

(b) In the event of a change in specifications of any alloy pursuant to Paragraph 3 (c) hereof, the guarantee and indemnification in subparagraph (a) shall be applicable to such alloy to the extent, and only to the extent, that the patent or patents infringed read upon one or more of the alloys having the specifications set forth in Paragraph 3 (a). If in Reynolds' opinion any request made by Ford pursuant to Paragraph 3 (c) hereof for a change in specifications of an alloy would result in or have the effect of causing Reynolds to infringe any other patent, Reynolds may refuse to make such change unless Ford agrees to defend, protect and save harmless Reynolds against all damages for actual or alleged infringement of any such patent by reason of Reynolds' processing and sale of the alloy made according to such changed specifications.

(c) Reynolds shall not assert against Ford any claim based upon patents or inventions owned or controlled by Reynolds when such claim relates to the processing into castings or alloying of molten metal or aluminum pig purchased by Ford under this Agreement.

(d) In addition to the covenant in subparagraph (c) above, Reynolds agrees that in the event it shall have granted, or during the term of this Agreement does grant, to any third person a license under any patents owned or controlled by it relating to any material (including aluminum products and fabricated products as defined in Paragraph 16 hereof) purchased by Ford under this Agreement, Reynolds, if so requested by Ford, shall grant to Ford a license under such patents on terms not less favorable than the terms upon which such license was granted to such third person.

10. *Technological Assistance.* Reynolds agrees that when and as requested by Ford during the term of this Agreement it shall furnish to Ford at its own expense reasonable technological, engineering, processing and manufacturing advice, information and assistance relative to the construction and operation by Ford of Ford's aluminum plant and the production, processing and manufacturing of products at such plant; provided, however, that Reynolds shall not be required to disclose to Ford any trade secret or other matter or information that Reynolds desires to retain in confidence and; provided further, that except as provided in Paragraph 9 (c) above, the rendering of any advice, information or assistance by Reynolds to Ford hereunder shall not entitle Ford to the use of anything covered by patents owned or controlled by Reynolds. It is further understood and agreed that Reynolds, in furnishing such advice, information and assistance to Ford, makes no guarantees and shall not be responsible or liable for the results obtained and that Ford, in each instance, shall decide at its own risk whether, and in what manner, to follow, adopt or act in reliance upon the advice, information and assistance furnished by Reynolds.

11. *Services Performed by the Parties.* Ford and Reynolds each agrees to indemnify and protect the other from and against all liability for injuries or damages to any person or property that occur as the result of the fault or negligence of its employees, agents, servants or representatives while on the premises of the other party. Employees, agents, servants and representatives of either Reynolds or Ford while in the performance of this contract on the premises of the other party shall comply with the traffic and safety rules and regulations of the party on whose premises they are then located as apply to the employees, agents, servants and representatives of the other party.

12. *Excusable Delays.* (a) Neither party shall be liable to the other for failure to comply with any of its obligations relative to the sale and purchase of molten metal and any aluminum pig hereunder when such failure is due to any of the following causes or events, whether occurring at or affecting the Kentucky Reduction Plant or Ford's aluminum plant or other plants or operations of Reynolds or Ford: acts of God or of a public enemy; acts of any person engaged in subversive activity or sabotage; strikes, slowdowns, lockouts or labor stoppages or disputes of any kind; insurrections; riots; fires; storms; floods; washouts; civil disturbances; explosions; breakage or accident to machinery or equipment; catastrophies; delays of a supplier due to any cause or event specified in this Paragraph; inability to obtain the necessary material, equipment and machinery for construction, acquisition or establishment of the expanded or new and additional facilities required by either party for

the performance of such obligations by it hereunder; interference by or pursuant to directives of the state, county, municipal or federal government or any agent, agency or department thereof; or without limiting the foregoing, causes or events (whether similar or dissimilar to the foregoing) beyond the control and without the fault or negligence of Reynolds or Ford in failing to comply with any of such obligations by it hereunder. In the event that Reynolds is unable to provide molten metal to Ford due to any excusable delay, as defined above, from the Kentucky Reduction Plant, Reynolds agrees, if so requested by Ford, to use its best efforts to provide an equivalent quantity of aluminum pig to Ford (at the price and on the terms specified in Paragraph 4 (b) above) from any of Reynolds' other aluminum reduction plants. Aluminum pig supplied by Reynolds pursuant to the next preceding sentence shall be applied against the quantity of molten metal that Ford is obligated to purchase from Reynolds under this Agreement.

(b) In the event of the occurrence of any cause or event specified in (a) above affecting Reynolds or Ford, the quantity of molten metal that Ford is obligated to purchase from Reynolds under this Agreement shall be reduced by an amount equal to that which Ford would have purchased during the continuance of any such cause or event if such cause or event had not occurred; provided, however, that upon the termination of any such cause or event, Reynolds, if so requested by Ford, shall use its best efforts to supply such amount to Ford. Ford shall be entitled, during any period when Reynolds is unable, as the result of the occurrence of any such cause or event, to supply all of the molten metal and aluminum pig that it is obligated to supply to Ford under this Agreement, to obtain from outside sources the amount of molten metal or aluminum pig that Reynolds is unable so to supply.

13. *Certificate of Necessity.* It is contemplated that Reynolds may make application to the United States Government for a Certificate of Necessity covering all or a part of the cost of constructing the Kentucky Reduction Plant. In procuring or attempting to procure such a Certificate of Necessity, Reynolds agrees that it will not obligate or commit itself in any manner to furnish any amount of aluminum from such plant to the United States Government or to any person designated by it so as to affect in any way the obligations of Reynolds to Ford hereunder.

14. *The Kentucky Reduction Plant.* Reynolds shall construct the Kentucky Reduction Plant at a site in Kentucky to be selected by Reynolds in its discretion. Reynolds shall use its best efforts to complete such plant and to have it ready for full operation by not later than September 1, 1957. Reynolds shall construct and maintain at its own expense roadways on its plant site so as to enable employees, servants, agents and representatives of Ford to have access to the Kentucky Reduction Plant to the extent necessary for Ford to perform its obligations under this agreement. Reynolds shall grant to Ford permission to construct and operate on the premises of the Kentucky Reduction Plant, in addition to roadways that Reynolds is obligated to construct and maintain at its own expense under the preceding sentence to enable Ford to perform its obligations under this agreement, such additional roadways and railroads, conveyors and/or material handling systems as are deemed by Ford to be desirable. In designing the physical layout of the Kentucky Reduction Plant, Reynolds shall confer with Ford and the parties shall coordinate the physical layout designs with Ford's plans for such additional roadways and railroads, conveyors and/or material handling systems. It is understood, however, that such roadways and additional roadways and railroads, conveyors and/or handling systems shall be so located as not unreasonably to interfere with Reynolds' operations at the Kentucky Reduction Plant. Reynolds shall notify Ford in writing of the precise site of its proposed Kentucky Reduction Plant within 30 days after the date first above written. If Ford desires to acquire any portion of the land included in the Kentucky Reduction Plant premises it shall so notify Reynolds in writing within 15 days after receipt of Reynolds' notice of the precise site. In such case, Reynolds agrees to convey to Ford a portion of the premises, not exceeding 150 acres, subject to the mutual consent of Ford and Reynolds as to the precise location of the tract and subject to Reynolds' ability to obtain any necessary consents and releases from holders of liens or mortgages on such tract. If Ford elects to purchase a tract of land from Reynolds, and if Reynolds and Ford fail to agree on or before December 15, 1955, upon the precise location of such tract or if Reynolds is unable to obtain such consents and releases on or before January 1, 1956 (or any ex-

tension thereof established by mutual agreement between Ford and Reynolds), this Agreement thereupon shall terminate in full without any obligation remaining on either party. Reynolds shall not be required to convey such tract by a conveyance containing covenants or warranties except such as Reynolds has received from its grantor, and the title granted to Ford to such tract shall be subject to the same easements and restrictions as the title granted to Reynolds. If such tract of land is sold to Ford, the purchase price therefor shall be either (a) the same cost per acre as Reynolds incurred to acquire such land, or (b) the appraised value thereof as appraised pursuant to the provisions of Section 8.03 of the Indenture of Mortgage and Deed of Trust dated June 1, 1955, from Reynolds and certain of its subsidiaries to Manufacturers Trust Company and A. F. Keuthen as Trustees, whichever amount is the greater, plus all necessary documentary stamps, taxes and closing costs on such conveyance to Ford. Although the Kentucky Reduction Plant is to be constructed by Reynolds for the primary purpose of complying with its delivery obligations hereunder, no restriction is imposed or implied by this Agreement on Reynolds' right to operate and manage the plant in the manner determined by Reynolds and to sell or dispose of in any manner and to any parties it desires such quantity of the products of such plant, including molten metal, as Reynolds is not specifically required to deliver to Ford hereunder.

15. *Financing.* Reynolds shall, promptly after the execution of this Agreement, use its best efforts to attempt to borrow the necessary funds for the construction of a 200,000,000 pound per year aluminum reduction plant together with the related facilities and working capital requirements, the amount of such funds being estimated to be $160,000,000. All of Reynolds' and Ford's obligations hereunder are contingent upon and subject to the condition precedent of Reynolds' ability to complete such financing on terms satisfactory to creditors of Reynolds as to whom Reynolds is committed at the time of such borrowing to obtain approval of such borrowing. If Reynolds is unable so to complete such financing on such satisfactory terms on or before January 1, 1956, it shall so notify Ford in writing on or before such date and upon such notice this Agreement shall terminate in full without any obligation remaining on either party. If such written notice is not given within the time aforesaid (or any extension thereof established by mutual agreement between Ford and Reynolds), such condition precedent to the obligations of the parties thereby shall be deemed waived.

16. *Aluminum Products and Fabricated Products.* (a) During each calendar year covered by the term of this Agreement, commencing with the year 1957, Ford shall give Reynolds the opportunity to supply to Ford not less than 30% of the aggregate dollar volume of aluminum products, as defined below, covered by purchase orders placed by Ford with outside persons, including Reynolds, during such year, provided Reynolds is competitive on the particular item or items of aluminum products involved. The selection of items comprised in the 30% of aggregate dollar purchases of aluminum products, and the percentage of Ford's requirements of each item (which may be more or less than 30% of a particular item), that Reynolds is given the opportunity to supply shall be determined by Ford, but shall be done upon as equitable a basis as is reasonably practicable. As used in this Paragraph, the term "aluminum products" shall mean aluminum or aluminum alloy in the form of sheet, bars, rod, coils, extrusions, foil, wire, cable, powder, or paste purchased by Ford for use in the production of automobiles, trucks, or tractors. As used in this Paragraph, the term "competitive" shall mean that the offer of the prospective seller to sell is as good as or better than that of competing sellers with respect to price, quality, delivery terms, the cost to Ford of related special tooling, and other terms and conditions of sale.

(b) During each calendar year covered by the term of this agreement, commencing with the year 1957, Ford shall give Reynolds an opportunity to supply to Ford not less than 30% of the aggregate dollar volume of fabricated products, as defined below, covered by purchase orders placed by Ford with outside persons, including Reynolds, during such year, provided Reynolds is competitive on the particular item or items of fabricated products involved. The selection of the items comprised in the 30% of aggregate dollar purchases of fabricated products, and the percentage of Ford's requirements of each item (which may be more or less than 30% of a particular item), that Reynolds is given the opportunity to supply shall be determined by Ford, but shall be done upon as equitable a basis as is reasonably practicable. As used in this Paragraph, the

term "fabricated products" shall mean parts or assemblies purchased by Ford in such form for use in the production of automobiles, trucks, or tractors, that are fabricated substantially completely from aluminum products, exclusive, however, of castings and assemblies made substantially from aluminum castings and exclusive of parts or assemblies that cannot be manufactured or sold by Reynolds without infringing the patents or other rights of third persons.

(c) The aggregate dollar volume referred to in this Paragraph shall be determined by Ford upon the basis of an estimate made by it in good faith at the time each purchase order is placed with an outside person, including Reynolds, such estimate to be based upon Ford's then current practice in determining maximum requirements for procurement purposes.

(d) From time to time, Ford shall notify Reynolds in writing of the quantity, specifications, and desired delivery dates of the particular item or items of aluminum products and fabricated products, and the percentages thereof, that Ford is giving Reynolds an opportunity to supply in accordance with subparagraphs (a) and (b) above. If Reynolds desires to sell to Ford the amount of the item or items covered by such notice, it shall, within the time limit specified in such notice, submit to Ford a quotation in writing with respect thereto. If Reynolds' quotation is competitive, Ford thereupon shall issue to Reynolds, and Reynolds shall accept, a purchase order, in the form of any of the purchase orders attached hereto designated as Exhibits A through E (as such purchase orders are revised in certain respects in the manner described in the list attached hereto designated as Exhibit F), covering the item or items involved; provided, however, that Ford in no event shall be required to issue purchase orders to Reynolds for more than 30% of the aggregate dollar volume of aluminum products nor for more than 30% of the aggregate dollar volume of fabricated products covered by all purchase orders placed by Ford with outside persons, including Reynolds, during the year involved. If special tools are required to produce the item or items covered by any such purchase order, and if Ford agrees to pay for such special tooling, Ford shall issue to Reynolds, and Reynolds shall accept, a purchase order, in the form of the purchase order attached hereto designated as Exhibit G (as such purchase order is revised in certain respects in the manner described in the list attached hereto designated as Exhibit F), covering the item or items of special tooling involved. Any failure by Reynolds to submit to Ford, within the aforesaid time limit, such a quotation (or in the event Reynolds submits such a quotation and such quotation is not competitive) shall be deemed to be an election by Reynolds to refuse to supply the aluminum products or fabricated products covered by Ford's notice, and the percentage of aluminum products or fabricated products referred to in this Paragraph shall be reduced *pro tanto* for the year involved.

(e) In the event Reynolds fails to submit such a quotation to Ford within such time limit, or in the event Reynolds submits such a quotation to Ford and such quotation is not competitive, Ford shall have an option (up to the 30% aggregate dollar volume amount referred to in subparagraphs (a) and (b) above) to require Reynolds to sell to Ford the item or items covered by the applicable written notice given Reynolds by Ford pursuant to subparagraph (d) above; provided, however, that (i) Reynolds shall not be required to sell to Ford any item that it is not then able to manufacture within the time designated by Ford, (ii) notwithstanding the provisions of the next succeeding sentence of this subparagraph, Reynolds shall not be required to sell to Ford (1) any item of aluminum products, as defined in subparagraph (a) above, at a price that is less than the price of such item as then quoted in the American Metal Market, or as then quoted in a comparable trade publication in the event quotations in the American Metal Market cease to be available, except that if at any time such quoted price exceeds the generally prevailing market price for such item (or if such price ceases to be quoted in the American Metal Market and all comparable trade publications), such market price shall be used in determining the price of such items below which Reynolds is not required to sell for so long as such market price is less than such quoted price (or for so long as such price ceases to be quoted), and (2) any item of fabricated products, as defined in subparagraph (b) above, at a price that Reynolds determines, on the basis of generally accepted accounting practices, to be less than the cost to it of manufacturing such item (with the aluminum content of such item computed, in determining such cost, in the manner described in clause (1) above), and (iii) Reynolds shall not be required to sell to Ford, during any calendar year, an amount, in pounds, of each of the types of aluminum products referred to in subparagraph (a) above, or an amount, in pounds, of all fabricated products in the aggregate, that exceeds the greater of

(1) an amount that bears the same ratio to the number of pounds of the type of aluminum products or all fabricated products, as applicable, produced by Reynolds for all of its customers (including Ford) during the preceding calendar year as the ratio that the number of pounds of molten metal and aluminum pig that Ford is obligated to purchase from Reynolds under this Agreement during such preceding calendar year (except that for purposes of this formula, the number of pounds of molten metal and aluminum pig that Ford is obligated to purchase from Reynolds under this Agreement for the years 1957 and 1958 shall be deemed to be 48,000,000 pounds) bears to the number of pounds of aluminum produced by Reynolds at all of its aluminum reduction plants during such preceding calendar year, or (2) an amount equal to the number of pounds of the type of aluminum products or all fabricated products, as applicable, purchased by Ford from Reynolds during such preceding calendar year. If Ford elects to exercise such option, Ford and Reynolds promptly shall determine by mutual agreement the price to be charged by Reynolds and paid by Ford for the item or items involved; provided, however, that if Ford and Reynolds fail to agree upon such price, the price shall be the price of comparable products in similar quantities from competing sellers, giving due consideration to quality, delivery terms the cost to Ford of related special tooling, and other terms and conditions of sale. When such price is determined (by mutual agreement or otherwise as provided in this subparagraph), Ford thereupon shall issue to Reynolds, and Reynolds shall accept, a purchase order, in the form of any of the purchase orders attached hereto designated as Exhibits A through E (as such purchase orders are revised in certain respects in the manner described in the list attached hereto designated as Exhibit F), covering the item or items involved. If special tools are required to produce the item or items covered by any such purchase order, and if Ford agrees to pay for such special tooling, Ford shall issue to Reynolds, and Reynolds shall accept, a purchase order, in the form of the purchase order attached hereto designated as Exhibit G (as such purchase order is revised in certain respects in the manner described in the list attached hereto designated as Exhibit F), covering the item or items of special tooling involved. In any case where Reynolds shall have determined, pursuant to this subparagraph, that the cost to it of manufacturing an item of fabricated products is more than the price of such item, it shall furnish to Ford, if so requested, a certified statement of its public accountants to that effect.

(f) This Paragraph shall apply to purchase orders issued by Ford on and after January 1, 1957, and prior to the date on which this Agreement shall end or terminate for any reason pursuant to the provisions hereof.

(g) Notwithstanding the printed terms and conditions on a purchase order issued by Ford to Reynolds and any acknowledgment form issued by Reynolds to Ford, each purchase order issued by Ford to Reynolds pursuant to this Agreement shall be deemed to be in the form of the corresponding purchase order attached hereto designated as Exhibit A through E or Exhibit G (as such corresponding purchase order is revised in certain respects in the manner described in the list attached hereto designated as Exhibit F).

17. *Assignment.* Except as otherwise provided herein, neither party shall delegate its obligations under this Agreement in whole or in part without the written consent of the other party.

18. *Government Contracts.* If at any time Ford shall notify Reynolds that any of the material to be purchased hereunder will be used by Ford in the performance of United States Government contracts which would require (in addition to the terms hereof) the inclusion of conditions specified by the Government in the agreement under which Ford acquires such quantity of material, then Reynolds and Ford shall negotiate an agreement applicable to the quantity of material so involved containing such provisions as may be required by the then current applicable Federal rules and regulations for inclusion in subcontracts of this character under Government prime contracts.

19. *Waiver.* No waiver by either party of any breach hereof committed by the other party shall constitute a waiver of any other breach, whether of similar or different character, and no such waiver shall constitute a continuing waiver of any subsequent breach or breaches of the provisions of this Agreement, whether of similar or different character.

20. *Remedies and Non-Modification.* (a) The remedies specified in this Agreement shall be cumulative and additional to any other or further remedies provided in law or equity.

(b) This contract contains the complete and final agreement between Reynolds and Ford relative to the subject matter hereof, and no agreement or other

understanding in any way purporting to modify the terms and conditions hereof shall be binding unless made in writing and signed by both parties.

21. *Fair Labor Standards Act.* Reynolds guarantees that it will comply with the requirements of the Fair Labor Standards Act of 1938, as amended, in producing molten metal and/or aluminum pig to be sold hereunder. All invoices shall contain an assurance in substantially the following form:

"Reynolds represents that it has complied with the Fair Labor Standards Act of 1938, as amended, in producing the goods covered by this invoice."

22. *Governing Law.* This Agreement has been made in and shall be construed, interpreted, and applied in accordance with the laws of the state of Michigan.

23. *Term.* (a) The term of this Agreement shall commence as of the date first above written and, unless sooner terminated pursuant to the above provisions hereof, shall continue in full force and effect until the end of calendar year 1967.

(b) Ford may, at its option, extend the term of this Agreement for a period of five calendar years beyond the end of calendar year 1967 by giving written notice of such extension to Reynolds not later than December 31, 1964. If such extension notice is given, this Agreement shall continue in full force and effect until the end of the extended period and thereafter until terminated, (either as of the end of the extended period or as of the end of any calendar year subsequent thereto), by either party upon at least one year's advance written notice to the other party.

24. *Notices.* (a) Every notice required to be given under this Agreement shall be in writing and shall be mailed or delivered to the other party at the following addresses:

Notices by Ford to Reynolds under Paragraphs 2, 3 and 8 given on and after September 1, 1957:

Plant Manager
Kentucky Reduction Plant
Reynolds Metals Company
Henderson, Kentucky

All other notices by Ford to Reynolds:

Vice President-Sales
Reynolds Metals Company
2500 South 3rd Street
Louisville, Kentucky

Notices by Reynolds to Ford:

Director of Purchasing
Ford Motor Company
3000 Schaefer Road
Dearborn, Michigan

(b) Either party by notice to the other may designate a different address to which notices shall be mailed or delivered.

IN WITNESS WHEREOF, each of the parties hereto by its duly authorized officers has caused this Agreement to be executed as of the 7th day of November, 1955.

REYNOLDS METALS COMPANY
By DAVID P. REYNOLDS,
Vice President.

Attest:

FRED R. EDNEY,
Ass't. Secretary.

FORD MOTOR COMPANY
By D. S. HARDER,
Executive Vice President.

Attest:

C. J. TELBRATH,
Secretary.

SHIPPING AND BILLING

PACKING, MARKING, AND SHIPPING — (a) All supplies shall be [illegible] packed, marked, and shipped in accordance with the requirements of the common carrier transporting such supplies [illegible] of this purchase order and in a manner which will permit the securing of the lowest transportation rates. Seller shall route shipments in accordance with Buyer's instructions. Seller shall reimburse Buyer for all expenses incurred by Buyer as a result of improper packing, marking, or routing.

(b) Seller shall mark each package in accordance with the current edition of Buyer's Package Identification Specifications or Steel Packaging Standards, as applicable.

(c) Any transportation charges paid by Seller with respect to which Seller is entitled to reimbursement shall be added to Seller's invoice as a separate item and the receipted freight bill shall be attached thereto.

(d) Unless otherwise provided in this purchase order, no charge shall be made by Seller for containers, crating, boxing, bundling, dunnage, drayage, or storage.

2. PACKING SLIPS, BILLS OF LADING, AND INVOICES — (a) Each Packing Slip, Bill of Lading, and Invoice shall bear the applicable purchase order number and the location of the plant to which supplies are to be shipped.

(b) A numbered Master Packing Slip shall accompany each shipment. If less than a carload is being shipped, the slip shall be included in one of the packages which shall be marked "Packing Slip Inside." In the case of a carload shipment the slip shall be inclosed in an essential envelope and tacked near the door on the inside of the freight car.

(c) Unless otherwise provided in this purchase order, invoices shall be submitted as directed on the applicable shipping release issued by Buyer.

3. EXPRESS SHIPMENTS — If Buyer finds it necessary to require shipment of any of the supplies covered by this purchase order by air or railway express rather than by freight because of the failure of Seller to meet the delivery requirements of this purchase order, Seller shall reimburse Buyer in an amount equal to the difference between the freight rate and the air or railway express rate unless such failure is due to causes beyond the control and without the fault or negligence of Seller.

4. STATEMENTS — Separate monthly statements must be rendered promptly to each accounting location covering invoices payable by that location.

GENERAL

5. ACCEPTANCE — Unless otherwise provided herein, the written acceptance by Seller of this purchase order or the commencement of any work or the performance of any services hereunder by Seller (including the commencement of any work or the performance of any services with respect to samples) shall constitute acceptance by Seller of this purchase order and of all of its terms and conditions.

6. MATERIALS, FABRICATION, AND SHIPPING RELEASES — Unless specific shipping instructions are provided in this purchase order, Seller shall not fabricate any of the supplies covered by this purchase order, or procure any of the materials required in their fabrication, or ship any of such supplies to Buyer, except to the extent authorized in written instructions furnished to Seller by Buyer. Buyer shall have no responsibility for supplies for which such written instructions have not been issued. Shipments in excess of those authorized may be returned to Seller and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with such shipments. Buyer may from time to time change shipping schedules specified in this purchase order or contained in such written instructions or direct temporary suspension of such scheduled shipments.

7. INSPECTION — All supplies shall be subject to inspection at destination. In case any supplies are defective in material or workmanship, or otherwise fail to meet the requirements of this purchase order, Buyer shall have the right to reject or to retain and correct such supplies. Rejected supplies will be returned to Seller at Seller's risk for credit and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with the rejected supplies. Seller shall pay Buyer for expenses incurred in correcting defective supplies.

8. WARRANTY — Seller warrants that the supplies covered by this purchase order will conform to the specifications, drawings, samples, or other description furnished or specified by Buyer, and will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship, and free from defect. In case any supplies do not conform to all of the warranties contained in this Paragraph, or implied by law, Buyer shall have the right to reject or to retain and correct such supplies. Rejected supplies will be returned to Seller at Seller's risk for credit and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with the rejected supplies. Seller shall pay Buyer for expenses incurred in correcting defective supplies. The warranties and remedies provided for in this Paragraph shall be in addition to the remedies provided for in Paragraph 7 (Inspection) of this purchase order and shall exist notwithstanding the acceptance by Buyer of all or a part of the supplies with respect to which such warranties and remedies are applicable.

9. PATENTS — Seller warrants that (1) the supplies specified herein, and (2) their sale or use, alone or in combination, according to Seller's specifications or recommendations, if any, will not infringe any United States or foreign patents, and agrees to indemnify and hold harmless Buyer and anyone selling or using any of Buyer's products against all judgments, decrees, costs, and expenses resulting from any alleged infringement, and agrees that Seller shall, upon request of Buyer and at Seller's own expense, defend or assist in the defense of any action which may be brought against Buyer or those selling or using any of Buyer's products by reason of any such alleged infringement.

10. TERMINATION AT OPTION OF BUYER — (a) Performance of work under this purchase order may be terminated by Buyer at its option, in whole or in part, at any time by delivery or by mailing of a written notice of termination to Seller. Buyer shall have such right of termination notwithstanding the existence with respect to Seller of any of the causes or events specified in Paragraph 12 (Excusable Delays) of this purchase order.

(b) After receipt of a notice of termination Seller shall, unless otherwise directed by Buyer, immediately terminate all work under this purchase order and shall, unless otherwise directed by Buyer, (1) terminate all orders and subcontracts relating to the performance of the work terminated by the notice of termination, (2) settle all claims arising out of such termination of orders and subcontracts, (3) transfer title and deliver to Buyer (1) all completed work which conforms in quality to the requirements of this purchase order [illegible] not exceed, in quantity, the amount authorized by [illegible] Buyer, and [illegible] reasonable quantities of work in process [illegible] produced or acquired in respect of the performance of the work [illegible] of a type and quality suitable for producing supplies which conform to the requirements of this purchase order and which cannot reasonably be used by Seller in producing supplies for itself or for its other customers, and (4) take all action necessary to protect property in Seller's possession in which Buyer has or may acquire an interest.

(c) Upon termination by Buyer under this Paragraph, Buyer shall pay to Seller the following amounts without duplication: (1) the purchase order price for supplies or services which have been completed in accordance with this purchase order and not previously paid for, (2) the actual costs (exclusive of profit) incurred by Seller in accordance with this purchase order to the extent such costs are reasonable in amount and are properly allocable or apportionable under generally accepted accounting practices to the terminated portion of this purchase order, including the actual cost of work in process and materials delivered to Buyer in accordance with subparagraph (b) of this Paragraph, and including the actual cost of discharging liabilities which are so allocable or apportionable, and (3) the reasonable costs incurred by Seller in protecting property in its possession in which Buyer has or may acquire an interest. Payments made under this subparagraph (c), exclusive of payments under subdivision (3) hereof, shall not exceed the aggregate price specified in this purchase order, less payments otherwise made or to be made.

(d) The provisions of this Paragraph shall not apply if this purchase order is terminated by Buyer for the default of Seller pursuant to Paragraph 11 hereof.

11. TERMINATION FOR DEFAULT OF SELLER — Whenever Seller (1) [illegible] fails to make deliveries of the supplies called for in this purchase order within the time specified in the purchase order or in any shipping release issued to seller, or (2) otherwise defaults in the performance of this purchase order, Buyer, subject to the provisions of Paragraph 12 (Excusable Delays) of this purchase order, may, by delivery, or by mailing, of a written notice of termination to Seller terminate the performance of work under this purchase order, in whole or in part, effective fifteen days after delivery or mailing of such notice, unless Seller shall, within such period, cure such default.

12. EXCUSABLE DELAYS — (a) Seller shall not be liable for delays or defaults in furnishing supplies or services hereunder, and Buyer shall not be liable for failure to accept supplies or services hereunder, if such delays or defaults on the part of Seller, or such failure on the part of Buyer, is due to (1) acts of God or of a public enemy, (2) acts of the Government of the United States or any state or political subdivision thereof, (3) acts of any person engaged in subversive activity or sabotage, (4) fires, floods, explosions, or other catastrophes, (5) epidemics and quarantine restrictions, (6) strikes, slowdowns, or labor stoppages of any kind, (7) freight embargoes, (8) unusually severe weather, (9) delays of a supplier due to such causes, or (10) causes beyond the control and without the fault or negligence of Seller in furnishing supplies or services hereunder or of Buyer in accepting supplies or services hereunder.

(b) In the event any delay or default by Seller in furnishing supplies or services hereunder is due to any of the causes or events set forth in subparagraph (a) of this Paragraph, Buyer shall be entitled to obtain such supplies or services elsewhere for the duration of such delay or default and to reduce, pro tanto, and without obligation to Buyer, the quantity or amount of supplies or services ordered from Seller under this purchase order.

13. CHANGES — (a) Buyer may at any time, by written change order, make changes in (1) the drawings, designs, or specifications applicable to the supplies or services covered by this purchase order, (2) the method of shipment or packing, and (3) the place of delivery.

(b) If any such changes affect the time for performance, the cost of manufacturing such supplies, or the cost of furnishing such services, Buyer shall make an equitable adjustment in the purchase price or the delivery schedule, or both.

14. CONSIGNED PROPERTY — Unless otherwise provided in this purchase order or in any other agreement between Buyer and Seller, all supplies, materials, facilities, tools, jigs, dies, fixtures, patterns, and equipment furnished to Seller by Buyer to perform this purchase order shall remain the property of Buyer, and Seller shall bear the risk of loss of and damage to such property, normal wear and tear excepted. Such property shall at all times be properly housed and maintained by Seller; shall be deemed to be personalty; shall be marked "Property of Ford Motor Company" by Seller; shall not be commingled with the property of Seller or with that of a third person; shall not be moved from Seller's premises without Buyer's prior written approval; and shall, upon request of Buyer, be immediately delivered to Buyer by Seller, f.o.b. cars or trucks at Seller's plant, properly packed and marked in accordance with the requirements of the carrier selected by Buyer to transport such property. Buyer shall have the right to enter onto Seller's premises at all reasonable times to inspect such property and Seller's records with respect thereto.

15. FAIR LABOR STANDARDS ACT — Seller guarantees that it will comply with the requirements of the Fair Labor Standards Act of 1938, as amended, in producing the supplies or performing the services to be furnished hereunder. All invoices shall contain the following covenant:

"Seller represents that it has complied with the Fair Labor Standards Act of 1938, as amended, in producing the supplies or performing the services covered by this invoice."

16. REMEDIES — The individual remedies reserved in this purchase order shall be cumulative and additional to any other or further remedies provided in law or equity or in this purchase order. No waiver of any breach of any provision of this purchase order shall constitute a waiver of any other breach, or of such provision.

17. MODIFICATION OF PURCHASE ORDER AND NON-ASSIGNMENT — This purchase order, together with any written instructions issued hereunder, contains the complete and final agreement between Buyer and Seller and no agreement or other understanding in any way purporting to modify the terms and conditions thereof shall be binding upon Buyer unless made in writing and [illegible]. Seller shall not delegate in any manner [illegible] the supplying of any services under this purchase order. Seller may [illegible] moneys due and to become due under this purchase order, provided, however, [illegible] be entitled to assert against the assignee thereof all rights, claims, and defenses of every type (including, without limitation, rights of setoff, recoupment, and counterclaim), which Buyer could assert against Seller whether acquired prior or subsequent to such assignment.

638-Bost

EXEMPTION CERTIFICATE

Buyer certifies that it is a manufacturer or producer of articles enumerated in subsection (a) or (b) of Section 3403 of Subchapter A, Chapter 29 of the Internal Revenue Code, and that it holds Certificate of Registry No. 423 issued by the District Director of Internal Revenue at Detroit, Michigan.

It is understood, for all purposes of subsection (c) of Section 3403 of Subchapter A, Chapter 29 of the Internal Revenue Code, that if any of the parts or accessories purchased under this Exemption Certificate are resold by Buyer otherwise than on or in connection with, or as a part of, an article enumerated in subsection (a) or (b) of said Section 3403 and manufactured or produced by Buyer, then Buyer shall be considered the manufacturer or producer of the parts or accessories so resold. It is further understood that the fraudulent use of this Certificate to secure exemption will subject the guilty parties to the [illegible] provided by law.

EXHIBIT B

FORD DIVISION

Ford Motor Company

PURCHASE ORDER NUMBER
FDE- 230532

FORD DIVISION OF FORD MOTOR COMPANY, OF DEARBORN, MICHIGAN, BUYER, HEREBY AGREES TO PURCHASE AND RECEIVE, AND

DATE OF ORDER

DELIVERY REQUIRED

SELLER AGREES TO MANUFACTURE, SELL AND DELIVER SUPPLIES OR SERVICES SPECIFIED HEREIN, SUBJECT TO THE TERMS AND CONDITIONS ON THE FACE AND REVERSE SIDE HEREOF.

SHIP TO	BILLS OF LADING	CHARGE AND MAIL INVOICES TO
FORD DIVISION OF FORD MOTOR COMPANY	MARK BILLS OF LADING "SUBJECT TO INSPECTION AT DESTINATION". MAIL ORIGINAL TO DESTINATION OF SHIPMENT AND ATTACH DUPLICATE TO ORIGINAL INVOICE.	FORD DIVISION OF FORD MOTOR COMPANY
F. O. B.	ROUTING	PAYMENT

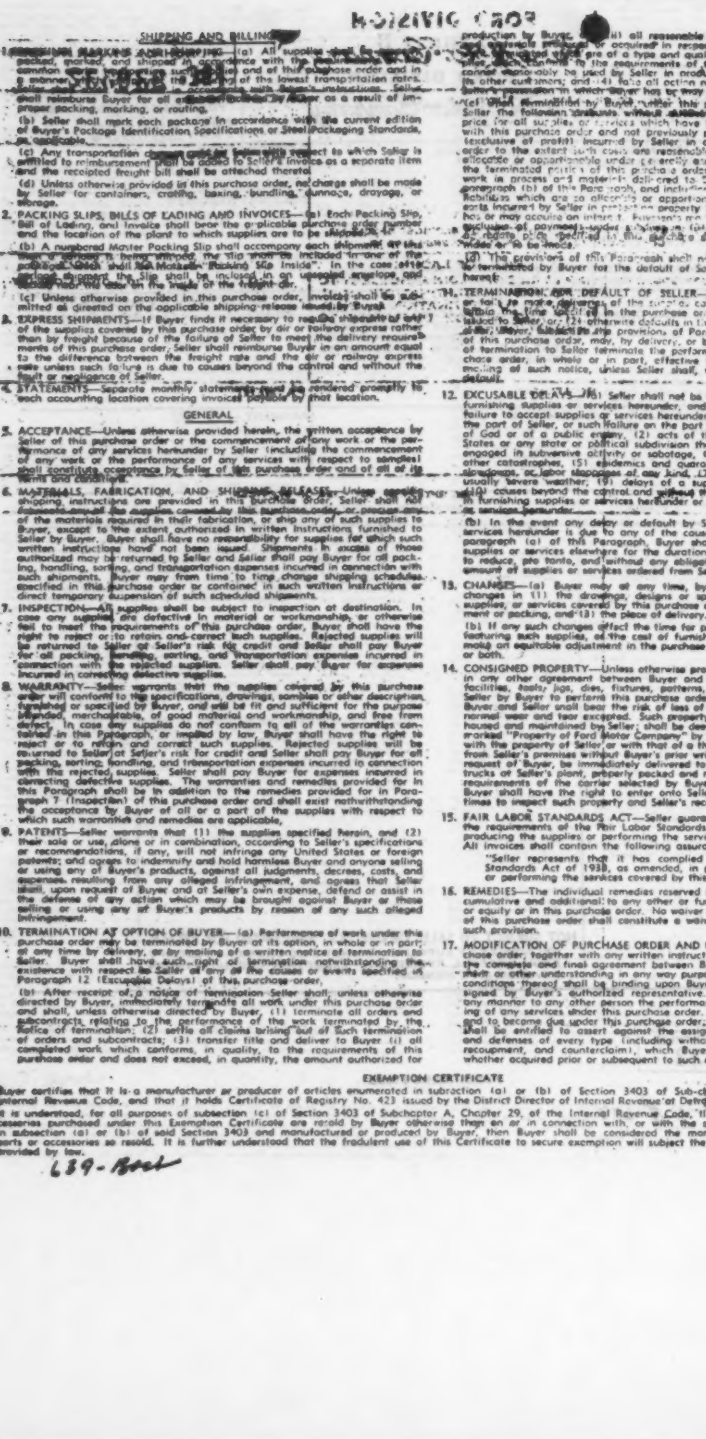
QUANTITY	SYMBOL	DESCRIPTION OF SUPPLIES OR SERVICES	PRICE
APPROXIMATELY _____% OF BUYER'S PURCHASES OF THE SUPPLIES DESCRIBED HEREIN REQUIRED IN THE PRODUCTION OF _____ MODEL. SUBJECT TO PARAGRAPH SIX ON THE REVERSE SIDE HEREOF.		NOT SUBJECT TO SALES OR USE TAX. PURCHASED FOR RESALE. DELIVERIES OF SUPPLIES AGAINST THIS ORDER ARE EXEMPT FROM FEDERAL EXCISE TAX. EXEMPTION CERTIFICATE ON REVERSE SIDE HEREOF.	

PURCHASE ORDER NUMBER
FDE-230532

PURCHASING FILES

FORM FD-8433 REV. [illegible]

U. S. v. Aluminum Co. of America, et al., 91 F. Supp. 333, 439



SHIPPING AND BILLING

MARKING AND SHIPPING—(a) All supplies shall be suitably packed, marked, and shipped in accordance with the applicable specifications and in such manner as will secure the lowest transportation rates. Seller shall comply with Buyer's shipping instructions. Seller shall reimburse Buyer for all additional transportation charges paid by Buyer as a result of improper packing, marking, or routing.

(b) Seller shall mark each package in accordance with the current edition of Buyer's Package Identification Specifications or Steel Packaging Standards, as applicable.

(c) Any transportation charges prepaid by Seller with respect to which Seller is entitled to reimbursement shall be added to Seller's invoice as a separate item and the receipted freight bill shall be attached thereto.

(d) Unless otherwise provided in this purchase order, no charge shall be made by Seller for containers, crating, boxing, bundling, dunnage, drayage, or storage.

2. PACKING SLIPS, BILLS OF LADING AND INVOICES—(a) Each Packing Slip, Bill of Lading, and Invoice shall bear the applicable purchase order number and the location of the plant to which supplies are to be shipped.

(b) A numbered Master Packing Slip shall accompany each shipment. If the shipment is being shipped, the slip shall be included in one of the packages. Each shall be marked "Packing Slip Inside". In the case of [illegible] the Packing Slip shall be enclosed in an upmost envelope, and marked "Packing Slip Enclosed" on the inside of the freight car.

(c) Unless otherwise provided in this purchase order, invoices shall be submitted as directed on the applicable shipping-release issued by Buyer.

3. EXPRESS SHIPMENTS—If Buyer finds it necessary to require shipments of any of the supplies covered by this purchase order by air or railway express rather than by freight because of the failure of Seller to meet the delivery requirements of this purchase order, Seller shall reimburse Buyer in an amount equal to the difference between the freight rate and the air or railway express rate unless such failure is due to causes beyond the control and without the fault or negligence of Seller.

4. STATEMENTS—Separate monthly statements shall be rendered promptly to each accounting location covering invoiced purchases for that location.

GENERAL

5. ACCEPTANCE—Unless otherwise provided herein, the written acceptance by Seller of this purchase order or the commencement of any work or the performance of any services hereunder by Seller (including the commencement of any work or the performance of any services with respect to supplies) shall constitute acceptance by Seller of this purchase order and of all of its terms and conditions.

6. MATERIALS, FABRICATION, AND SHIPPING RELEASES—Unless specific shipping instructions are provided in this purchase order, Seller shall not [illegible] of the supplies covered by this purchase order, or procure any of the materials required in their fabrication, or ship any of such supplies to Buyer, except to the extent authorized in written instructions issued to Seller by Buyer. Buyer shall have no responsibility for supplies for which such written instructions have not been issued. Shipments in excess of those authorized may be returned to Seller and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with such shipments. Buyer may from time to time change shipping schedules specified in this purchase order or contained in such written instructions or disregard any portion of such scheduled shipments.

7. INSPECTION—All supplies shall be subject to inspection at destination. In case any supplies are defective in material or workmanship, or otherwise fail to meet the requirements of this purchase order, Buyer shall have the right to reject or to retain and correct such supplies. Rejected supplies will be returned to Seller at Seller's risk for credit and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with the rejected supplies. Seller shall pay Buyer for expenses incurred in correcting defective supplies.

8. WARRANTY—Seller warrants that the supplies covered by this purchase order will conform to the specifications, drawings, samples or other description furnished or specified by Buyer, and will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship, and free from defect. In case any supplies do not conform to all of the warranties contained in this Paragraph or implied by law, Buyer shall have the right to reject or to retain and correct such supplies. Rejected supplies will be returned to Seller at Seller's risk for credit and Seller shall pay Buyer for all packing, sorting, handling, and transportation expenses incurred in connection with the rejected supplies. Seller shall pay Buyer for expenses incurred in correcting defective supplies. The warranties and remedies provided for in this Paragraph shall be in addition to the remedies provided for in Paragraph 7 (Inspection) of this purchase order and shall exist notwithstanding the acceptance by Buyer of all or a part of the supplies with respect to which such warranties and remedies are applicable.

9. PATENTS—Seller warrants that (1) the supplies specified herein, and (2) their sale or use, alone or in combination, according to Seller's specifications or recommendations, if any, will not infringe any United States or foreign patents; and agrees to indemnify and hold harmless Buyer and anyone selling or using any of Buyer's products, against all judgments, decrees, costs, and expenses, resulting from any alleged infringement, and agrees that Seller shall, upon request of Buyer and at Seller's own expense, defend or assist in the defense of any action which may be brought against Buyer or those selling or using any of Buyer's products by reason of any such alleged infringement.

10. TERMINATION AT OPTION OF BUYER—(a) Performance of work under this purchase order may be terminated by Buyer at its option, in whole or in part, at any time by delivery, or by mailing of a written notice of termination to Seller. Buyer shall have such right of termination notwithstanding the existence with respect to Seller of any of the causes or events specified in Paragraph 12 (Excusable Delays) of this purchase order.

(b) After receipt of a notice of termination Seller shall, unless otherwise directed by Buyer, immediately terminate all work under this purchase order and shall, unless otherwise directed by Buyer, (1) terminate all orders and subcontracts relating to the performance of the work terminated by the notice of termination; (2) settle all claims arising out of such termination of orders and subcontracts; (3) transfer title and deliver to Buyer (i) all completed work which conforms, in quality, to the requirements of this purchase order and does not exceed, in quantity, the amount authorized for production by Buyer, (ii) all reasonable quantities of work in process, raw materials, parts or other property acquired in respect of the performance of the terminated portion of this purchase order which are of a type and quality suitable for producing supplies conforming to the requirements of this purchase order and which cannot reasonably be used by Seller in producing supplies for itself or for its other customers; and (4) take all action necessary to protect property in Seller's possession in which Buyer has or may acquire an interest.

(c) Upon termination by Buyer under this paragraph, Buyer shall pay to Seller the following amounts without duplication: (1) [illegible] price for all supplies or services which have been completed in accordance with this purchase order and not previously paid for; (2) the actual cost (exclusive of profit) incurred by Seller in accordance with this purchase order to the extent such costs are reasonable in amount and are properly allocable or apportionable under generally accepted accounting practices to the terminated portion of this purchase order, including the actual cost of work in process and materials delivered to Buyer in accordance with subparagraph (b) of this Paragraph, and including the actual cost of disposing of claims which are so allocable or apportionable; and (3) the reasonable costs incurred by Seller in protecting property in connection with which Buyer has or may acquire an interest in accordance with this subparagraph (b). Payment made to Seller for the foregoing purposes (exclusive of payments under subparagraph (a) hereof) shall not exceed the total purchase price, as specified in this purchase order, less payments otherwise made or to be made.

(d) The provisions of this Paragraph shall not apply to this purchase order if it is terminated by Buyer for the default of Seller pursuant to Paragraph 11 hereof.

11. TERMINATION FOR DEFAULT OF SELLER—Whenever Seller (1) refuses or fails to make deliveries of the supplies, or any part thereof, within the time specified in the purchase order, or any extension thereof granted by Seller, or (2) otherwise defaults in the performance of this purchase order, subject to the provisions of Paragraph 12 (Excusable Delays) of this purchase order, may, by delivery, or by mailing, of a written notice of termination to Seller terminate the performance of work under this purchase order, in whole or in part, effective fifteen days after delivery or mailing of such notice, unless Seller shall, within such period, cure such default.

12. EXCUSABLE DELAYS—(a) Seller shall not be liable for delays or defaults in furnishing supplies or services hereunder, and Buyer shall not be liable for failure to accept supplies or services hereunder, if such delays or defaults on the part of Seller, or such failure on the part of Buyer, are due to (1) acts of God or of a public enemy, (2) acts of the Government of the United States or any state or political subdivision thereof, (3) acts of any person engaged in subversive activity or sabotage, (4) fires, floods, explosions or other catastrophes, (5) epidemics and quarantine restrictions, (6) strikes, lockouts, or labor stoppages of any kind, (7) freight embargoes, (8) unusually severe weather, (9) delays of a supplier due to such causes, or (10) causes beyond the control and without the fault or negligence of Seller in furnishing supplies or services hereunder or of Buyer in accepting supplies or services hereunder.

(b) In the event any delay or default by Seller in furnishing supplies or services hereunder is due to any of the causes or events set forth in subparagraph (a) of this Paragraph, Buyer shall be entitled to obtain such supplies or services elsewhere for the duration of such delay or default and to reduce, pro tanto, and without any obligation to Buyer, the quantity or amount of supplies or services ordered from Seller under this purchase order.

13. CHANGES—(a) Buyer may at any time, by written change order, make changes in (1) the drawings, designs or specifications applicable to the supplies, or services covered by this purchase order, (2) the method of shipment or packing, and (3) the place of delivery.

(b) If any such changes affect the time for performance, the cost of manufacturing such supplies, or the cost of furnishing such services, Buyer shall make an equitable adjustment in the purchase price or the delivery schedule, or both.

14. CONSIGNED PROPERTY—Unless otherwise provided in this purchase order or in any other agreement between Buyer and Seller, all supplies, materials, facilities, tools, jigs, dies, fixtures, patterns, and equipment furnished to Seller by Buyer to perform this purchase order shall remain the property of Buyer and Seller shall bear the risk of loss of the same, reasonable normal wear and tear excepted. Such property shall at all times be properly housed and maintained by Seller; shall be deemed to be personality; shall be marked "Property of [illegible] Motor Company"; shall not be commingled with the property of Seller or with that of a third person; shall not be moved from Seller's premises without Buyer's prior written approval; and shall, upon request of Buyer, be immediately delivered by Seller, f.o.b. cars or trucks at Seller's plant, properly packed and marked in accordance with the requirements of the carrier selected by Buyer to transport such property. Buyer shall have the right to enter upon Seller's premises at any reasonable times to inspect such property and Seller's records with respect thereto.

15. FAIR LABOR STANDARDS ACT—Seller guarantees that it will comply with the requirements of the Fair Labor Standards Act of 1938, as amended, in producing the supplies or performing the services to be furnished hereunder. All invoices shall contain the following assurance:

"Seller represents that it has complied with the Fair Labor Standards Act of 1938, as amended, in producing the supplies or performing the services covered by this invoice."

16. REMEDIES—The individual remedies reserved in this purchase order shall be cumulative and additional to any other or further remedies provided in law or equity or in this purchase order. No waiver of any breach of any provision of this purchase order shall constitute a waiver of any other breach, or of such provision.

17. MODIFICATION OF PURCHASE ORDER AND NON-ASSIGNMENT—This purchase order, together with any written instructions issued hereunder, contains the complete and final agreement between Buyer and Seller and no agreement or other understanding in any way purporting to modify the terms and conditions thereof shall be binding upon Buyer unless made in writing and signed by Buyer's authorized representative. Seller shall not delegate in any manner to others the performance of any work or the furnishing of any services under this purchase order. Seller may assign rights due and to become due under this purchase order; provided, however, that Buyer shall be entitled to assert against the assignee thereof all rights, claims, and defenses of every type (including without limitation, rights of setoff, recoupment, and counterclaim), which Buyer could assert against Seller, whether acquired prior or subsequent to such assignment.

EXEMPTION CERTIFICATE

Buyer certifies that it is a manufacturer or producer of articles enumerated in subsection (a) or (b) of Section 3403 of Sub-chapter A, Chapter 29 of the Internal Revenue Code, and that it holds Certificate of Registry No. 423 issued by the District Director of Internal Revenue at Detroit, Michigan.

It is understood, for all purposes of subsection (c) of Section 3403 of Subchapter A, Chapter 29, of the Internal Revenue Code, that if any of the parts or accessories purchased under this Exemption Certificate are resold by Buyer otherwise than on or in connection with, or with the sale of, an article enumerated in subsection (a) or (b) of said Section 3403 and manufactured or produced by Buyer, then Buyer shall be considered the manufacturer or producer of the parts or accessories so resold. It is further understood that the fraudulent use of this Certificate to secure exemption will subject the guilty parties to the penalties provided by law.

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EXHIBIT C

MERCURY DIVISION
FORD MOTOR COMPANY

PURCHASING FILES

PURCHASE ORDER NUMBER
ME No. 32392

MERCURY DIVISION, FORD MOTOR COMPANY, DETROIT, MICHIGAN, BUYER, HEREBY AGREES TO PURCHASE AND RECEIVE, AND

DATE OF ORDER

DELIVERY REQUIRED

SELLER AGREES TO MANUFACTURE, SELL AND DELIVER SUPPLIES OR SERVICES SPECIFIED HEREIN, SUBJECT TO THE TERMS AND CONDITIONS ON THE FACE AND REVERSE SIDE HEREOF.

SHIP TO	BILLS OF LADING	CHARGE AND MAIL INVOICES TO
MERCURY DIVISION FORD MOTOR COMPANY	MARK BILLS OF LADING "SUBJECT TO INSPECTION AT DESTINATION." MAIL ORIGINAL TO DESTINATION OF SHIPMENT	MERCURY DIVISION FORD MOTOR COMPANY

F. O. B.	TRANSPORTATION	ROUTING	PAYMENT

QUANTITY	SYMBOL	DESCRIPTION OF SUPPLIES OR SERVICES	UNIT	PRICE PER UNIT
"APPROXIMATELY _____ PERCENT OF BUYERS REQUIREMENTS THRU _____. SUBJECT TO PARAGRAPH (E) SIX ON THE REVERSE SIDE OF THIS ORDER."		DELIVERIES OF SUPPLIES AGAINST THIS ORDER ARE EXEMPT FROM FEDERAL EXCISE TAX. EXEMPTION CERTIFICATE ON REVERSE SIDE HEREOF.		

MD-9678
JUN 56

MERCURY DIVISION
FORD MOTOR COMPANY

BY _____
PURCHASING

PURCHASE ORDER NUMBER
ME No. 32392

DPR U.S.A. # 640

SHIPPING AND BILLING

1. PACKING, MARKING AND SHIPPING.—(a) All articles shall be properly packed, marked and shipped in accordance with the requirements of the governing interstate transportation authorities and of the purchase order and in a manner which will permit the lowest transportation rates. Seller shall notify Buyer promptly in accordance with Buyer's instructions if Seller shall refuse with Buyer for all damage sustained by Buyer as a result of improper packing, marking, or routing.

(b) Seller shall affix such marks and arrangements in accordance with the current edition of Buyer's Purchase Identification Specifications or Steel Purchase Standards, as applicable.

(c) Any transportation charges paid by Seller with respect to which Seller is entitled to reimbursement shall be added to Seller's invoice as a separate item and the supported freight bill shall be promptly forwarded. (d) Unless otherwise specified in this purchase order, no charge shall be made by Seller for containers, crating, boxing, bundling, dunnage, drayage, or storage.

2. PACKING SLIPS, BILLS OF LADING, AND INVOICES.—(a) Each Packing Slip, Bill of Lading, and Invoice shall bear the applicable purchase order number and the location of the plant to which articles are to be shipped. (b) A numbered Packing Section Slip shall accompany each shipment. If less than a carload is being moved, the slip shall be enclosed in one of the packages which shall be marked "Packing Slip Inside." In the case of a carload shipment the slip shall be tied, or in an unsealed envelope and fastened near the door on the inside of the loaded car.

(c) Unless otherwise provided in this purchase order, invoices shall be submitted as directed on the applicable shipping release issued by Buyer.

3. EXPRESS SHIPMENTS.—If Buyer finds it necessary to require shipment of any of the articles covered by this purchase order by air or railway express rather than by freight, Seller shall, upon notice to that effect from Buyer, make any or all of the future shipments of the articles covered by this purchase order by the means specified by Buyer, and Buyer shall reimburse Seller in an amount equal to the difference between the actual rate and the air or express rate, provided such shipments are necessary to cure delays beyond the control and without the fault or negligence of Seller.

4. STATEMENT OF [illegible] shall be rendered promptly to each destination [illegible] as directed payable by that location.

GENERAL

5. ACCEPTANCE.—Unless otherwise provided herein, the written acceptance by Seller of this purchase order or the commencement of performance by Seller pursuant to any provision hereof or the commencement of any work or the performance of any services with respect to material shall constitute acceptance by Seller of this purchase order and of all of its terms and conditions.

6. MATERIALS, FABRICATION, AND SHIPPING RELEASES.—Unless specific shipping instructions are provided in this purchase order, Seller shall not fabricate any of the articles covered by this purchase order, or procure any of the materials required in the fabrication of any of such articles for Buyer, except to the extent authorized in accordance with instructions furnished to Seller by Buyer. Buyer shall have the right to pay for surplus for which such written instructions have not been given. Shipments in excess of those authorized may be refused by Buyer and Seller shall pay Buyer for all expenses, including transportation charges, incurred in connection therewith. Seller shall not be entitled to any charges arising out of the retention by Buyer of any excess shipments.

7. INSPECTION.—Unless otherwise provided in this purchase order, all articles and services covered by this purchase order shall be subject to inspection and test by Buyer at all reasonable times and places prior to acceptance, but neither such inspection nor failure to inspect shall relieve Seller from responsibility for any defects or other failure to conform to the requirements of this purchase order which may exist at the time of delivery, whether or not such defects or failure to conform are discovered or discoverable at the time of delivery, and Buyer shall have the right to reject, return, and require Seller to correct or replace articles with such defects or failure to conform, or to require the correction thereof at Seller's plant prior to delivery thereof at Buyer's option but at Seller's risk and expense. Articles rejected or required to be corrected may be returned to Seller at Seller's risk and expense. Seller shall pay Buyer for all transportation charges for articles shipped to Seller by Buyer because they are defective or because of Seller's failure to conform to the requirements of this purchase order. Buyer shall have the right to charge to Seller all costs and damages incurred by Buyer in connection with the inspection, rejection, and return of defective articles or articles not conforming to the requirements of this purchase order, including but not limited to, costs of inspection, testing, receiving, unloading, storage, and handling, and costs incurred by Buyer in procuring articles to replace those rejected. Buyer shall have the right to withhold payment for articles which have been rejected until Seller has removed them or has agreed to their disposition. Buyer shall have the right to charge Seller for any loss or damage to articles while they are in Buyer's possession which is caused by defects therein for which Seller is responsible hereunder. Buyer's inspection, payment for, or failure to reject articles shall not relieve Seller from any obligations with respect to warranties.

8. WARRANTY.—Seller warrants that the articles covered by this purchase order will be [illegible] and free from defects in material and workmanship, and that they will conform to the requirements of this purchase order, including any drawings or specifications incorporated herein by reference. If any of the articles covered by this purchase order are found to be defective or not in conformity with the requirements of this purchase order during the period of [illegible] Buyer shall have the right to require Seller to repair or replace such articles, or Buyer may repair or replace such articles at Seller's expense. Articles repaired or replaced by Seller shall be subject to the provisions of this paragraph to the same extent as articles originally delivered hereunder. Seller shall pay Buyer for all transportation charges for articles returned to Seller for repair or replacement, and for all expenses incurred by Buyer in connection therewith. Seller shall pay Buyer for expenses incurred in correcting defective articles.

9. PATENTS.—Seller warrants that (1) the supplies furnished hereto, and [illegible] (2) the use or sale of any supplies furnished hereunder, will not infringe any patent now or hereafter issued to or acquired by Seller, and Seller will indemnify Buyer and its customers against any loss, damage, cost, or expense arising out of any such alleged infringement.

10. TERMINATION AT OPTION OF BUYER.—(a) Performance of work under this purchase order may be terminated by Buyer at any time in whole or in part, by giving notice by mail or telegram to Seller specifying the extent to which performance of work under this purchase order is terminated and the date upon which such termination becomes effective. After receipt of any such notice Seller shall, except as otherwise directed by Buyer, immediately discontinue all work under this purchase order and shall, unless otherwise directed by Buyer, (1) terminate all orders and subcontracts relating to the performance of the work terminated by the notice of termination; (2) settle all claims arising out of such termination of orders and subcontracts; (3) transfer title and deliver to Buyer (i) all completed work which conforms, as nearly as practicable, to the requirements of this purchase order and does not exceed, in quantity, the amount authorized for production by Buyer, and (ii) all reasonable quantities of [illegible] and materials produced or acquired in connection with the performance of the work terminated hereunder, and (4) take such action as may be necessary, or as Buyer may direct, for the protection and preservation of all property related to this purchase order and which is in the possession of Seller and in which Buyer has or may acquire an interest. Subject to the provisions of this paragraph, Buyer shall pay to Seller the following amounts without duplication: (1) the purchase price for all articles or services which have been completed in accordance with this purchase order and not previously paid for; (2) the actual cost of [illegible] incurred by Seller in accordance with this purchase order to the extent such costs are recoverable in amount and are properly allocable or apportionable under generally accepted accounting practices to the terminated portion of this purchase order, including the actual cost of work in process and materials delivered to Buyer in accordance with subparagraph (b) of this Paragraph, and including the actual cost of [illegible] liabilities which are so allocable or apportionable; and (3) the reasonable costs incurred by Seller in protecting property in its possession in which Buyer has or may acquire an interest. Payments made under subparagraph (c), costs, and payments under subdivision [illegible] shall not exceed the aggregate price specified in this purchase order, less [illegible] otherwise credited to be made.

(b) The provisions of this paragraph shall not apply if this purchase contract is [illegible] by Buyer for the default of Seller pursuant to Paragraph 11 hereof.

11. TERMINATION FOR DEFAULT OF SELLER.—Whenever Seller (1) refuses or fails to make deliveries of the supplies called for in this purchase order within the time specified in the purchase order or in any shipping release issued to Seller, or (2) otherwise defaults in the performance of this purchase order, Buyer, subject to the provisions of Paragraph 12 (Force Majeure) of this purchase order, may, by delivery, or by mailing, of a written notice of termination to Seller terminate the performance of work under this purchase order, in whole or in part, effective upon date after delivery or mailing of such notice, unless Seller shall, within such period, cure such default.

12. FORCE MAJEURE.—(a) Neither Buyer nor Seller shall be liable for a failure to perform hereunder arising from (1) acts of God or of a public enemy, (2) acts of the Government of the United States or any state or political subdivision or any department or regulatory agency thereof or agency created thereby, (3) acts of any person engaged in subversive activity or sabotage, (4) fires, floods, explosions, or other catastrophe, (5) epidemics or quarantine restrictions, (6) strikes, slowdowns, lockouts, or labor disputes or disputes of any kind, (7) freight embargoes, (8) unusually severe weather, (9) delays of a supplier due to any such cause or event, or without limiting the foregoing, (10) causes or events beyond the control and without the fault or negligence of Buyer or Seller in failing to perform hereunder.

(b) In the event of a failure by Seller to perform hereunder arising from any of the causes or events set forth in subparagraph (a) of this Paragraph, Buyer shall be entitled to obtain supplies or services covered by this purchase order elsewhere for the duration of such failure and to reduce or terminate, as to any undelivered portion of this purchase order, the quantity or amount of articles or services ordered from Seller under this purchase order.

13. CHANGES.—(a) Buyer may at any time, by written change order, make changes in (1) the drawings, designs, and/or specifications applicable to the supplies and/or services covered by this purchase order, (2) the method of packing and shipping thereof, and (3) the place of delivery. (b) If any such change causes an increase or decrease in the cost of, or the time required for the performance of any part of the work under this purchase order, whether or not changed by any such order, an equitable adjustment in the purchase price or the delivery schedule, or both, shall be made in the written change order, or an agreement to be made between Buyer and Seller. Any claim by Seller for adjustment hereunder must be asserted within thirty days from the date of receipt by Seller of the change order and shall be determined by mutual agreement of the parties hereto. Nothing in this clause shall excuse Seller from proceeding with the prosecution of performance of any such changed order as directed, unless otherwise provided in such change order or agreement.

14. CONSIGNED PROPERTY.—Unless otherwise provided in this purchase order or in any other agreement between Buyer and Seller, all patterns, materials, tools, dies, jigs, fixtures, gauges, patterns, or equipment furnished to Seller by Buyer or partially paid for by Buyer under the progress payment provisions of this purchase order (hereinafter collectively called "Property of Fruit Metals Company") shall be and remain the property of Buyer and shall be plainly marked or otherwise adequately identified by Seller as such. Seller shall not use Property of Fruit Metals Company for any purpose except for the manufacture of articles for Buyer under this purchase order or as authorized in writing by Buyer. Seller shall keep Property of Fruit Metals Company in good condition while in its possession and shall, upon request of Buyer, deliver the same to Buyer or to such point as Buyer may direct. Seller shall carry adequate insurance against loss or damage to Property of Fruit Metals Company while in its possession and shall comply with the requirements of the carrier selected by Buyer to transport such property. Buyer shall have the right to enter the premises of any subcontractor of Seller for the purpose of removing Property of Fruit Metals Company. Seller shall not subject Property of Fruit Metals Company to any lien or other encumbrance and shall immediately pay or discharge any such lien or encumbrance which may arise. Seller shall not dispose of scrap or waste resulting from the processing of Property of Fruit Metals Company without the written consent of Buyer.

15. FAIR LABOR STANDARDS ACT.—Seller guarantees that it will comply with the requirements of the Fair Labor Standards Act of 1938, as amended, and of all orders, rules, and regulations issued thereunder. Seller agrees to indemnify and hold harmless Buyer from any and all liability, damages, fines, penalties, and costs which Buyer may suffer or incur by reason of Seller's failure to comply with the Fair Labor Standards Act of 1938, as aforesaid, or with any of the rules, orders, or regulations issued thereunder.

16. REMEDIES.—The enumerated remedies reserved in this purchase order shall be cumulative and additional to any other or further remedies provided in law or equity or elsewhere in this purchase order and shall not be deemed to be exclusive of any other breach, or of such provision.

17. MODIFICATION OF PURCHASE ORDER AND NON-ASSIGNMENT.—This purchase order may not be altered or modified except in writing signed by an authorized agent of Buyer. Buyer shall not be bound by any [illegible] or other understanding with any agent of Seller unless the same is [illegible] in writing and signed by Buyer's authorized representative. Seller shall not delegate in any manner to any other person the performance of any work or the supplying of any services under this purchase order without the prior written consent of Buyer, and no assignment by Seller of any right or interest hereunder shall be valid without such consent; provided, however, that Buyer shall be entitled to direct and may be obliged to assign thereof all rights, claims, and defenses of every kind and nature against Seller which Buyer could assert against Seller, whether asserted prior or subsequent to such assignment.

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EXEMPTION CERTIFICATE

Buyer certifies that it is a manufacturer or producer of articles enumerated in Section 4061, Subchapter A, Chapter 32 of the Internal Revenue Code, and that it holds Certificate of Registry No. 423 issued by the District Director of Internal Revenue at Detroit, Michigan.

It is understood, for all purposes of Subchapter A, Chapter 32 of the Internal Revenue Code, that if any of the articles purchased under this Exemption Certificate are resold by Buyer otherwise than on or in connection with, or with the sale of an article enumerated in said Section 4061, and manufactured or produced by Buyer, then Buyer shall be considered the manufacturer or producer of the articles so resold. It is further understood that the fraudulent use of the Certificate to secure exemption will subject the guilty parties to the penalties provided by law.

EXHIBIT D

TRACTOR AND IMPLEMENT DIVISION

Ford Motor Company

VOID

PURCHASING FILES

TI 2701-TPE FEB 58

2500 EAST MAPLE ROAD
BIRMINGHAM, MICHIGAN

PURCHASE ORDER NUMBER
TPE 3611

TRACTOR AND IMPLEMENT DIVISION, Ford Motor Company, BUYER, HEREBY AGREES TO PURCHASE AND RECEIVE, AND

DATE OF ORDER

DELIVERY REQUIRED

SELLER, AGREES TO MANUFACTURE, SELL AND DELIVER SUPPLIES OR SERVICES SPECIFIED HEREIN, SUBJECT TO THE TERMS AND CONDITIONS ON THE FACE AND REVERSE SIDE HEREOF.

SHIP TO	BILLS OF LADING	CHARGE AND MAIL INVOICES TO
TRACTOR AND IMPLEMENT DIVISION Ford Motor Company BUILDING NO. 6 HIGHLAND PARK 3, MICHIGAN	MARK BILLS OF LADING "SUBJECT TO INSPECTION AT DESTINATION". MAIL ORIGINAL TO DESTINATION OF SHIPMENT AND ATTACH DUPLICATE TO ORIGINAL INVOICE.	TRACTOR AND IMPLEMENT DIVISION Ford Motor Company P.O. BOX 9553 HIGHLAND PARK 3, MICH. ATTENTION: ACCOUNTS PAYABLE

F. O. B.	TRANSPORTATION TERMS	ROUTING	PAYMENT TERMS

QUANTITY	SYMBOL	DESCRIPTION OF SUPPLIES OR SERVICES	PRICE
APPROXIMATELY _____ PERCENT OF BUYER'S PURCHASED REQUIREMENTS THROUGH _____ SUBJECT TO PARAGRAPH (6) SIX ON REVERSE SIDE OF THIS ORDER.		VOID	

PURCHASE ORDER NUMBER
TPE 3611

SPR D. S. # 641

TI 2701

SHIPPING AND BILLING

1. PACKING, MARKING, AND SHIPPING—(a) All supplies shall be properly packed, marked, and shipped in accordance with the requirements of the common carrier transporting such supplies and of this purchase order and in a manner which will permit the securing of the lowest transportation rates. Seller shall route shipments in accordance with Buyer's instructions. Seller shall reimburse Buyer for all expenses incurred by Buyer as a result of improper packing, marking, or routing.

(b) Seller shall mark each package in accordance with the current edition of Buyer's Package Identification Specifications or Steel Packaging Standards, as applicable.

(c) Any transportation charges paid by Seller with respect to which Seller is entitled to reimbursement shall be added to Seller's invoice as a separate item and the receipted freight bill shall be attached thereto.

(d) Unless otherwise provided in this purchase order, no charge shall be made by Seller for containers, crating, boxing, bundling, dunnage, drayage, or storage.

2. PACKING SLIPS, BILLS OF LADING, AND INVOICES—(a) Each Packing Slip, Bill of Lading, and invoice shall bear the applicable purchase order number and the location of the plant to which supplies are to be shipped. (b) A numbered Master Packing Slip shall accompany each shipment. If less than a carload is being shipped, the slip shall be included in one of the packages which shall be marked "Packing Slip Inside." In the case of a carload shipment the Slip shall be inclosed in an unsealed envelope and tacked near the door on the inside of the freight car.

(c) Unless otherwise provided in this purchase order, invoices shall be submitted as directed on the applicable shipping release issued by Buyer.

3. EXPRESS SHIPMENTS—If Buyer finds it necessary to require shipment of any of the supplies covered by this purchase order by air or railway express rather than by freight because of the failure of Seller to meet the delivery requirements of this purchase order, Seller shall reimburse Buyer in an amount equal to the difference between the freight rate and the air or railway express rate unless such failure is due to causes beyond the control and without the fault or negligence of Seller.

4. STATEMENTS—Separate monthly statements must be rendered promptly to each accounting location covering invoices payable by that location.

GENERAL

5. ACCEPTANCE—Unless otherwise provided herein, the written acceptance by Seller of this purchase order or the commencement of any work or the performance of any services hereunder by Seller (including the commencement of any work or the performance of any services with respect to samples) shall constitute acceptance by Seller of this purchase order and of all of its terms and conditions.

6. MATERIALS, FABRICATION, AND SHIPPING RELEASES—Unless specific shipping instructions are provided in this purchase order, Seller shall not fabricate any of the supplies covered by this purchase order, or procure any of the materials required in their fabrication, or ship any of such supplies to Buyer, except to the extent authorized in written instructions issued to Seller by Buyer. Buyer shall have no responsibility for supplies for which such written instructions have not been issued. Shipments in excess of those authorized may be returned to Seller and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with such shipments. Buyer may from time to time change shipping schedules specified in this purchase order or contained in such written instructions or direct temporary suspension of such scheduled shipments.

7. INSPECTION—All supplies shall be subject to inspection at destination. In case any supplies are defective in material or workmanship, or otherwise fail to meet the requirements of this purchase order, Buyer shall have the right to reject or to retain and correct such supplies. Rejected supplies will be returned to Seller at Seller's risk for credit and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with the rejected supplies. Seller shall pay Buyer for expenses incurred in correcting defective supplies.

8. WARRANTY—Seller warrants that the supplies covered by this purchase order will conform to the specifications, drawings, samples, or other description furnished or specified by Buyer, and will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship, and free from defect. In case any supplies do not conform to all of the warranties contained in this Paragraph, or implied by law, Buyer shall have the right to reject or to retain and correct such supplies. Rejected supplies will be returned to Seller at Seller's risk for credit and Seller shall pay Buyer for all packing, handling, sorting, and transportation expenses incurred in connection with the rejected supplies. Seller shall pay Buyer for expenses incurred in correcting defective supplies. The warranties and remedies provided for in this Paragraph shall be in addition to the remedies provided for in Paragraph 7 (Inspection) of this purchase order and shall exist notwithstanding the acceptance by Buyer of all or a part of the supplies with respect to which such warranties and remedies are applicable.

9. PATENTS—Seller warrants that (1) the supplies specified herein, and (2) their sale or use, alone or in combination, according to Seller's specifications or recommendations, if any, will not infringe any United States or foreign patents; and agrees to indemnify and hold harmless Buyer and anyone selling or using any of Buyer's products against all judgments, decrees, costs, and expenses resulting from any alleged infringement, and agrees that Seller shall, upon request of Buyer and at Seller's own expense, defend or assist in the defense of any action which may be brought against Buyer or those selling or using any of Buyer's products by reason of any such alleged infringement.

10. TERMINATION AT OPTION OF BUYER—(a) Performance of work under this purchase order may be terminated by Buyer at its option, in whole or in part, at any time before delivery, or by written notice of termination to Seller. Buyer shall have such right of termination notwithstanding the existence with respect to Seller of any of the causes or events specified in Paragraph 12 (Excusable Delays) of this purchase order.

(b) After receipt of a notice of termination Seller shall, unless otherwise directed by Buyer immediately terminate all work under this purchase order and shall, unless otherwise directed by Buyer,

(1) terminate all orders and subcontracts relating to the performance of the work terminated by the notice of termination;

(2) settle all claims arising out of such termination of orders and subcontracts;

(3) transfer title and deliver to Buyer (i) all completed work which conforms, in quality, to the requirements of this purchase order and does not exceed in quantity, the amount authorized for production by Buyer, and (ii) all reasonable quantities of work in process and materials produced or acquired in respect of the performance of the work terminated which are of a type and quality suitable for producing supplies which conform to the requirements of this purchase order and which cannot reasonably be used by Seller in producing supplies for itself or for its other customers; and

(4) take all action necessary to protect property in Seller's possession in which Buyer has or may acquire an interest.

(c) Upon termination by Buyer under this Paragraph, Buyer shall pay to Seller the following amounts without duplication:

(1) the purchase order price for all supplies or services which have been completed in accordance with this purchase order and not previously paid for;

(2) the actual costs (exclusive of profit) incurred by Seller in accordance with this purchase order to the extent such costs are reasonable in amount and are properly allocable or apportionable under generally accepted accounting practices to the terminated portion of this purchase order, including the actual cost of work in process and materials delivered to Buyer in accordance with subparagraph (b) of this Paragraph, and including the actual cost of discharging liabilities which are so allocable or apportionable; and

(3) the reasonable costs incurred by Seller in protecting property in its possession in which Buyer has or may acquire an interest. Payments made under this subparagraph (c), exclusive of payments under subdivision (3) hereof, shall not exceed the aggregate price specified in this purchase order, less payments otherwise made or to be made.

(d) The provisions of this Paragraph shall not apply if this purchase order is terminated by Buyer for the default of Seller pursuant to Paragraph 11 hereof.

11. TERMINATION FOR DEFAULT OF SELLER—Whenever Seller (1) refuses or fails to make deliveries of the supplies called for in this purchase order within the time specified in the purchase order or in any shipping release issued to Seller, or

(2) otherwise defaults in the performance of this purchase order, Buyer, subject to the provisions of Paragraph 12 (Excusable Delays) of this purchase order, may, by delivery, or by mailing, of a written notice of termination to Seller terminate the performance of work under this purchase order, in whole or in part, effective fifteen days after delivery or mailing of such notice, unless Seller shall, within such period, cure such default.

12. EXCUSABLE DELAYS—(a) Seller shall not be liable for delays or defaults in furnishing supplies or services hereunder and Buyer shall not be liable for failure to accept supplies or services hereunder if such delays or defaults on the part of Seller, or such failure on the part of Buyer, is due to

(1) acts of God or of a public enemy,
(2) acts of the Government of the United States or any state or political subdivision thereof,
(3) acts of any person engaged in subversive activity or sabotage,
(4) fires, floods, explosions, or other catastrophes,
(5) epidemics and quarantine restrictions,
(6) strikes, slowdowns, or labor stoppages of any kind,
(7) freight embargoes,
(8) unusually severe weather,
(9) delays of a supplier due to such causes, or
(10) causes beyond the control and without the fault or negligence of Seller in furnishing supplies or services hereunder or of Buyer in accepting supplies or services hereunder.

(b) In the event any delay or default by Seller in furnishing supplies or services hereunder is due to any of the causes or events set forth in subparagraph (a) of this Paragraph, Buyer shall be entitled to obtain such supplies or services elsewhere for the duration of such delay or default and to reduce, pro tanto, and without any obligation to Buyer, the quantity or amount of supplies or services ordered from Seller under this purchase order.

13. CHANGES—(a) Buyer may at any time, by written change order, make changes in

(1) the drawings, designs, or specifications applicable to the supplies or services covered by this purchase order,
(2) the method of shipment or packing, and
(3) the place of delivery.

(b) If any such changes affect the time for performance, the cost of manufacturing such supplies, or the cost of furnishing such services, Buyer shall make an equitable adjustment in the purchase price or the delivery schedule, or both.

14. CONSIGNED PROPERTY—Unless otherwise provided in this purchase order or in any other agreement between Buyer and Seller, all supplies, materials, facilities, tools, jigs, dies, fixtures, patterns, and equipment furnished to Seller by Buyer to perform this purchase order shall remain the property of Buyer, and Seller shall bear the risk of loss of and damage to such property, normal wear and tear excepted. Such property shall at all times be properly housed and maintained by Seller; shall be deemed to be personality; shall be marked "Property of Ford Motor Company" by Seller; shall not be commingled with the property of Seller or with that of a third person; shall not be moved from Seller's premises without Buyer's prior written approval; and shall, upon request of Buyer, be immediately delivered to Buyer by Seller, f.o.b. cars or trucks at Seller's plant, properly packed and marked in accordance with the requirements of the carrier selected by Buyer to transport such property. Buyer shall have the right to enter onto Seller's premises at all reasonable times to inspect such property and Seller's records with respect thereto.

15. FAIR LABOR STANDARDS ACT—Seller guarantees that it will comply with the requirements of the Fair Labor Standards Act of 1938, as amended, in producing the supplies or performing the services to be furnished hereunder.

All invoices shall contain the following assurance:

"Seller represents that it has complied with the Fair Labor Standards Act of 1938, as amended, in producing the supplies or performing the services covered by this invoice."

16. REMEDIES—The individual remedies reserved in this purchase order shall be cumulative and additional to any other or further remedies provided in law or equity or in this purchase order. No waiver of any breach of any provision of this purchase order shall constitute a waiver of any other breach, or of such provision.

17. MODIFICATION OF PURCHASE ORDER AND NON-ASSIGNMENT—This purchase order, together with any written instructions issued hereunder, contains the complete and final agreement between Buyer and Seller and no agreement or other understanding in any way purporting to modify the terms and conditions thereof shall be binding upon Buyer unless made in writing and signed by Buyer's authorized representative. Seller shall not delegate in any manner to any other person the performance of any work or the supplying of any services under this purchase order. Seller may assign moneys due and to become due under this purchase order; provided, however, that Buyer shall be entitled to assert against the assignee thereof all rights, claims, and defenses of every type (including, without limitation, rights of setoff, recoupment, and counterclaim), which Buyer could assert against Seller, whether acquired prior or subsequent to such assignment.

6-1-Book

EXHIBIT E

PURCHASING FILE
[illegible] EXHIBIT E

Ford Motor Company
FIXED DELIVERY PURCHASE ORDER—METAL

FIXED DELIVERY PURCHASE ORDER NUMBER
FEM-754702

THE FORD MOTOR COMPANY, OF DEARBORN, MICHIGAN, BUYER, HEREBY AGREES TO PURCHASE AND RECEIVE, AND

DATE OF ORDER

QUANTITY AND DELIVERY REQUIRED

QUANTITY	MONTH

SELLER, AGREES TO MANUFACTURE, SELL AND DELIVER SUPPLIES OR SERVICES SPECIFIED HEREIN, SUBJECT TO THE TERMS AND CONDITIONS ON THE FACE AND REVERSE SIDE HEREOF.

SHIP TO
FORD MOTOR COMPANY

BILLS OF LADING AND SHIPPING NOTICE
MARK BILLS OF LADING "SUBJECT TO INSPECTION AT DESTINATION." MAIL ORIGINAL TO TRAFFIC DEPARTMENT AT DESTINATION OF SHIPMENT AND ATTACH DUPLICATE TO ORIGINAL INVOICE. MAIL NOTICE OF SHIPMENT TO ATTENTION:

CHARGE AND MAIL INVOICES TO
FORD MOTOR COMPANY

CAR SPOT NUMBER:

F.O.B.	TRANSPORTATION TERMS	ROUTING	PAYMENT TERMS

METAL SPECIFICATION DATA

METALS LEAD NUMBER	TYPE AND GRADE	INDIVIDUAL COIL SIZE				
		CONTROLLING FACTOR		LIMITATIONS		PREFERRED
PART NO.	THICKNESS OR DIAMETER		OUTSIDE DIAMETER (INCHES)			
PART NAME	WIDTH		INSIDE DIAMETER (INCHES)	MINIMUM	MAXIMUM	
	LENGTH		COIL WEIGHT (POUNDS)			

ADDITIONAL SPECIFICATIONS:

PACKAGING DATA

COIL				CUT LENGTH				SKIDS		PAPER COVERAGE			TRANSPORTATION AND LOADING DATA			
CONTROLLING FACTOR		LIMITATIONS	PREFERRED	☐ OVAL PKG. ☐ FILED PKG.			QUANTITY	YES	NO	YES	NO	TYPE REQUIRED	TRANSPORTATION MODE	PREFERRED	LOAD CHECKED YES	LOAD CHECKED NO
				FILED PKG.	LENGTH PER FILE OR MAX. WGT.								OPEN RAIL CAR			
	COILS PER PACKAGE			FILES PER PKG.									TRUCK			
	PACKAGE WGT. (LBS.)			PACKAGE WEIGHT (LBS.)												

ADDITIONAL INFORMATION

PRICE	
BASE	
TOTAL	

DELIVERIES OF SUPPLIES AGAINST THIS ORDER ARE EXEMPT FROM FEDERAL EXCISE TAX. EXEMPTION CERTIFICATE ON REVERSE SIDE HEREOF.

Ford Motor Company

BY _____
PURCHASING

QUANTITY
PURCHASE ORDER NUMBER
FEM-754702

642

DPR U.S.A.

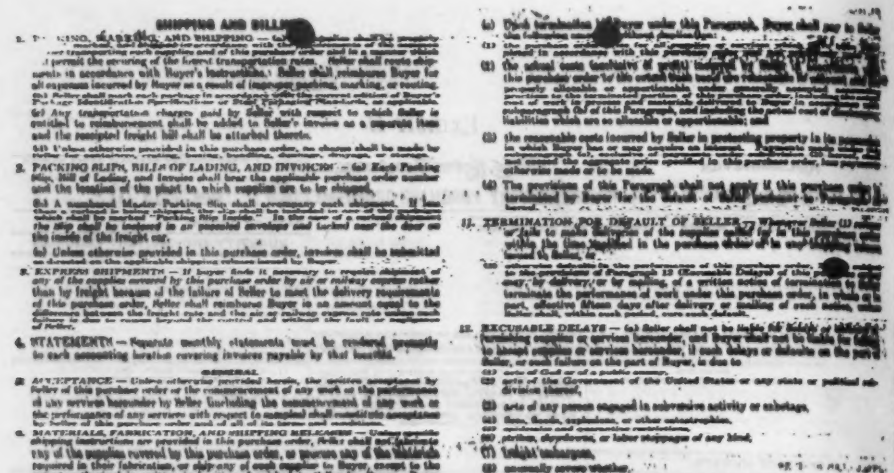


EXHIBIT F

LIST OF PURCHASE ORDER REVISIONS

1. The printed terms and conditions on the reverse side of purchase orders constituting Exhibits A through E of this Agreement are revised as follows:

a. A sentence is added after the second sentence in Paragraph 1 (a) (PACKING, MARKING, AND SHIPPING), as follows: "The preceding sentence shall be deemed not to alter or change any applicable freight allowances."

b. The words, "unless designed by Buyer", are added before the words, "will be fit and sufficient", in Paragraph 8 (WARRANTY).

c. A clause is added before the words, "and (2) their sale", in Paragraph 9 (PATENTS), as follows: "(provided that the supplies are supplies sold by Seller

in the ordinary course of its business or are made in accordance with Seller's specifications)."

d. A new Paragraph is added, as follows:

"The total order and each shipment release hereunder for aluminum products shall be subject to the tolerance, in yield and quantity, then customary in the aluminum industry, unless otherwise agreed upon by Buyer and Seller. There shall be no such tolerance for fabricated products, unless otherwise agreed upon by Buyer and Seller."

2. The printed terms and conditions on the reverse side of the purchase order constituting Exhibit G of this Agreement are revised as follows:

a. The words, "unless designed by Buyer" are added before the words, "will be fit and sufficient", in Paragraph 3 (WARRANTY).

b. A clause is added before the words, "and (2) their sale", in Paragraph 4 (*a*) (PATENTS), as follows: "(provided that the supplies are supplies sold by Seller in the ordinary course of its business or are made in accordance with Seller's specifications)."

EXHIBIT G

Ford Motor Company

ORIGINAL
DEC '55 Z707
(Previous editions may NOT be used)

PURCHASE ORDER NUMBER
ST [redacted]

THE FORD MOTOR COMPANY, OF DEARBORN, MICHIGAN, BUYER, HEREBY AGREES TO PURCHASE, AND

DATE OF ORDER

CHARGE AND MAIL INVOICES TO
FORD MOTOR COMPANY

PAYMENT TERMS

SELLER AGREES TO DESIGN AND CONSTRUCT, OR TO REWORK, AS PROVIDED HEREIN, THE TOOLING (DIES, FIXTURES, MOLDS OR PATTERNS (HEREINAFTER REFERRED TO AS "TOOLING")) SPECIFIED HEREIN, IN ACCORDANCE WITH THE TERMS AND CONDITIONS ON THE FACE AND REVERSE SIDE HEREOF AND ON ANY CONTINUATION SHEETS.

PROJECT NUMBER	ITEM NUMBER	ACCOUNT CLASSIFICATION	U. P. C.

QUANTITY	DESCRIPTION OF TOOLING	PRICE

COMPLETION DATE:

Ford Motor Company

BY

PURCHASING

PURCHASE ORDER NUMBER
ST [redacted]

645

DPR D.S.H

AGREEMENT

THIS AGREEMENT made and entered into this 6th day of December, 1955, by and between REYNOLDS METALS COMPANY, a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Richmond Virginia (hereinafter referred to as "Reynolds"), and FORD MOTOR COMPANY, a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Dearborn, Michigan (hereinafter referred to as "Ford");

WITNESSETH:

WHEREAS on November 7, 1955, Reynolds and Ford entered into a contract (hereinafter referred to as the "Agreement") relating to the sale by Reynolds and the purchase by Ford of virgin aluminum alloys in molten form and certain aluminum products and fabricated products, as defined in the Agreement; and

WHEREAS Reynolds and Ford desire to amend the Agreement in certain respects;

NOW, THEREFORE, in consideration of the premises and the mutual promises contained herein and contained in the Agreement, each of the parties hereto agree as follows:

1. Subparagraph (a) of Paragraph 7 (*Delivery Period*) of the Agreement is amended to provide as follows:

"(a) The yearly quantity of molten metal specified in Paragraph 2 (a) above shall, with respect to any period covered by the delivery period prior to September 1, 1958, be the smaller of (i) 48,000,000 pounds, or (ii) an amount equal to the actual requirements of Ford's aluminum plant for molten metal during such period; provided, however, that if Ford shall fail to purchase from Reynolds during such period an aggregate quantity of 48,000,000 pounds of molten metal, Ford, except to the extent that such failure shall have been excusable pursuant to the provisions of Paragraph 12 hereof, shall purchase from Reynolds at such times and in such quantities as it may determine, and Reynolds shall sell to Ford to the extent that it is reasonably able to do so, during the balance of the term of this Agreement an aggregate amount of molten metal equal to the difference between the amount purchased by Ford during the delivery period prior to September 1, 1958, and 48,000,000 pounds. If Ford shall not have purchased such aggregate amount of molten metal from Reynolds during the term of this Agreement, Ford shall purchase from Reynolds, and Reynolds shall sell to Ford, any remaining balance of such aggregate amount immediately following the end of the term of this Agreement, such balance to be delivered at the rate of deliveries being made during the period immediately preceding the end of such term.

2. The first sentence of subparagraph (b) of Paragraph 7 (*Delivery Period*) of the Agreement is amended to provide as follows:

"(b) If for any reason the Kentucky Reduction Plant is not, at the commencement of the delivery period, ready and capable of production of the yearly quantity of molten metal specified in subparagraph (a) above, then Reynolds, if so requested by Ford, shall supply the remaining portion of such yearly quantity in the form of aluminum pig from some of its other aluminum reduction plants (at the price and on the terms specified in Paragraph 4 (b) above).

3. The seventh sentence of Paragraph 14 (*The Kentucky Reduction Plant*) of the Agreement is amended to provide as follows:

"Reynolds shall notify Ford in writing of the precise site of its proposed Kentucky Reduction Plant by not later than January 15, 1956."

4. The tenth sentence of Paragraph 14 (*The Kentucky Reduction Plant*) of the Agreement is amended to delete the dates, "December 15, 1955," and "January 1, 1956," therein and to substitute therefor, respectively, the dates, "February 1, 1956," and "February 15, 1956,".

5. The third sentence of Paragraph 15 (*Financing*) of the Agreement is amended to delete the date, "January 1, 1956," therein and to substitute therefor the date, "February 15, 1956,".

6. Except as hereby amended, all of the provisions of the Agreement shall continue in full force and effect for the term thereof.

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be duly executed as of the day and year first above written.

REYNOLDS METALS COMPANY,
By JOS. C. MCCONNELL.

Attest:

ALLYN DILLARD, *Secretary.*

FORD MOTOR COMPANY,
By D. S. HARDER.

Attest:

C. J. TELBRATH.

AGREEMENT

THIS AGREEMENT made and entered into this 10th day of January 1956, by and between REYNOLDS METALS COMPANY, a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Richmond, Virginia, (hereinafter referred to as "Reynolds"), and FORD MOTOR COMPANY, a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in Dearborn, Michigan, (hereinafter referred to as "Ford");

WITNESSETH:

WHEREAS on November 7, 1955, Reynolds and Ford entered into a contract relating to the sale by Reynolds and the purchase by Ford of virgin aluminum alloys in molten form and certain aluminum products and fabricated products, as defined in the Agreement; and

WHEREAS on December 6, 1955, Reynolds and Ford amended in certain respects the contract between them (which contract, as thereby amended, is hereinafter referred to as the "Agreement"); and

WHEREAS Reynolds and Ford desire to amend the Agreement to give effect to their decision to construct their respective reduction and aluminum plants in Alabama rather than in Kentucky, to change the annual quantity of molten aluminum that Reynolds is obligated to sell and Ford is obligated to purchase under the Agreement, and to revise the Agreement in certain other respects;

NOW, THEREFORE, in consideration of the premises and the mutual promises contained herein and contained in the Agreement, each of the parties hereto agrees as follows:

1. The Agreement is amended to delete the word "Kentucky" wherever it appears therein and to substitute therefor the word "Alabama".

2. Subparagraph (a) of Paragraph 2 (*Quantity*) of the Agreement is amended to provide as follows:

"(a) Subject to the provisions of Paragraph 7 (a) hereof the yearly quantity of molten metal to be sold by Reynolds and purchased by Ford during each full calendar year included in the delivery period of this agreement shall be 64,000,000 pounds; provided, however,

"(i) that with respect to any five full-year periods (which need not be calendar years), Ford, at any time upon the giving of not less than three months' prior written notice to Reynolds, may elect to increase such yearly quantity by an amount equal to not more than 15% thereof (or by an amount equal to not more than 15% of the amount of the increased yearly quantity resulting from action under Paragraph 2 (d) hereof), and

"(ii) that with respect to any five full-year periods (which need not be calendar years and which may be the same years in which, or years in addition to those in which, Ford has elected to take increases under (i) above), Ford, at any time upon the giving of not less than three months' prior written notice to Reynolds, may elect to reduce such yearly quantity by an amount equal to not more than 10% thereof (or by an amount equal to not more than 10% of the increased yearly quantity resulting from action under Paragraph 2 (d) hereof)

effective for at least six (6) months (or longer if so provided in such notice) during the year following the expiration of the three months' period and any such increase may be reduced or, if less than 15%, may be further increased, and any such decrease may be reduced, or if less than 10%, may be further decreased from time to time during the year, subject to the same conditions, all increases and decreases expiring on the date specified in such notice unless further extended by new notices. If Ford elects to reduce such yearly quantity one or more times pursuant to this subparagraph, Ford, except to the extent that

it otherwise shall have been excused pursuant to the provisions of Paragraph 12 hereof, shall purchase from Reynolds, and Reynolds shall sell to Ford, during the twelve-month period following the end of the term of this Agreement, an aggregate amount of molten metal (in addition to any amount of molten metal that Ford shall become obligated to purchase from Reynolds during such period pursuant to Paragraph 7 (a) hereof) equal to the amount represented by all such reductions in such yearly quantity. Any reduction or termination of an increase in the yearly quantity made pursuant to this subparagraph shall not, for purposes of determining such aggregate amount of molten metal, be considered to be a reduction in the yearly quantity. The amount of molten metal to be sold by Reynolds and purchased by Ford hereunder shall not be in excess of the reasonably anticipated requirements of Ford, determined by Ford from time to time, for aluminum alloys at Ford's aluminum plant for use in the production of metal articles."

3. Subparagraph (d) of Paragraph 2 (*Quantity*) of the Agreement is amended to delete the numbers "36" and "50,000,000" in the first sentence thereof and to substitute therefor, respectively, the numbers "24" and "20,000,000"; to delete the number "50,000,000" in the second sentence thereof and to substitute therefor the number "20,000,000"; and to change the third, fourth, and fifth sentences thereof to provide as follows:

"If such yearly quantity is increased pursuant to a request by Ford, the quantity of molten metal and aluminum pig to be sold by Reynolds and purchased by Ford hereunder shall be increased accordingly; provided, however, that Reynolds' and Ford's obligations with respect to the increase in such yearly quantity at Ford's request as aforesaid shall be contingent upon and subject to the condition precedent to (i) Reynolds' ability to borrow necessary funds to construct a minimum economically practicable addition (of not more than 50,000,000 pounds per year capacity) to the Alabama Reduction Plant, and (ii) Reynolds' ability to arrange for the supplying of the necessary electrical power. Reynolds shall, promptly after receipt of Ford's request to increase such yearly quantity, use its best efforts to attempt to borrow such necessary funds and arrange for such necessary electrical power. If Reynolds is unable so to arrange for such financing or for such electrical power within 6 months after receipt of Ford's request, it shall so notify Ford within 30 days after expiration of such 6-month period and upon the giving of such notice the obligations of the parties with respect to the increase in such yearly quantity previously requested by Ford shall terminate in full."

4. The Agreement is amended to delete subparagraph (b) of Paragraph 7 (*Delivery Period*) thereof.

5. The second sentence of subparagraph (a) of Paragraph 12 (*Excusable Delays*) is amended to provide as follows:

"In the event that Reynolds is unable to provide molten metal to Ford due to an excusable delay, as defined above, from the Alabama Reduction Plant, Reynolds agrees, if so requested by Ford, to use its best efforts to provide an equivalent quantity of molten metal to Ford (at the price specified in Paragraph 4 (a) above) from Reynolds' existing reduction plant at Listerhill, Alabama, and if unable to do so, to use its best efforts to provide an equivalent quantity of aluminum pig to Ford (at the price specified in Paragraph 4 (b) above) from any of Reynolds' aluminum reduction plants."

6. The Agreement is amended to revise Paragraph 14 (*The Alabama Reduction Plant*) thereof to provide as follows:

"Reynolds shall construct the Alabama Reduction Plant at a site in Alabama to be selected by Reynolds in its discretion. Until such time as such plant is completed and in operation, Reynolds shall supply molten metal to Ford, as required to by this Agreement, from its existing reduction plant at Listerhill, Alabama. Reynolds shall construct and maintain at its own expense roadways on its plant site so as to enable employees, servants, agents and representatives of Ford to have access to the Alabama Reduction Plant to the extent necessary for Ford to perform its obligations under this Agreement. If Ford elects to purchase land from Reynolds pursuant to the provisions of this Paragraph, one such roadway built by Reynolds shall run from the Alabama Reduction Plant to a point on Ford's property line as near as is practicable to the location of Ford's aluminum plant. Reynolds shall grant to Ford permission to construct and operate on the premises of the Alabama Reduction Plant, in addition to roadways that Reynolds is obligated to construct and maintain at its own expense under the preceding two sentences to enable Ford to perform its obligations under this Agreement, such additional roadways

and railroads, conveyers and/or material handling systems as are deemed by Ford to be desirable. In designing the physical layout of the Alabama Reduction Plant, Reynolds shall confer with Ford and the parties shall coordinate the physical layout designs with Ford's plans for such additional roadways and railroads, conveyors and/or material handling systems. It is understood, however, that such roadways and additional roadways and railroads, conveyors and/or handling sytsems shall be so located as not unreasonably to interfere with Reynolds' operations at the Alabama Reduction Plant. Reynolds represents to Ford that the site of its Alabama Reduction Plant shall be at or contiguous to its present Listerhill Reduction Plant at Listerhill, Alabama. Reynolds also represents to Ford that it has under option a tract of land of approximately one square mile in area contiguous to its present plant property at its Listerhill Reduction Plant. Reynolds grants to Ford an option, exercisable by notice in writing to Reynolds (on or before February 1, 1956) to acquire any portion of said one square mile area, not exceeding one hundred fifty acres, which Ford may select. If Ford exercises such option on or before February 1, 1956, Reynolds shall convey or cause to be conveyed to Ford a portion of such tract, not exceeding one hundred fifty acres, as selected by Ford. Reynolds agrees that any liens or mortgages attributable to it on the land conveyed to Ford shall be removed by it at its own expense. If Ford elects to purchase such land from Reynolds, it shall be Reynolds' option as to whether it shall sell the tract to Ford or cause the tract to be sold to Ford by the owner or owners. If Reynolds sells such tract to Ford, the purchase price therefor shall be either (a) the same cost per acre as Reynolds incurred to acquire such land, or (b) the appraised value thereof as appraised pursuant to the provisions of Section 8.03 of the Indenture of Mortgage and Deed of Trust dated June 1, 1955, from Reynolds and certain of its subsidiaries to Manufacturers Trust Company and A. F. Keuthen as Trustees, whichever amount is the greater, plus all necessary documentary stamps, taxes and closing costs on such conveyance to Ford. In such case, Reynolds shall not be required to convey such tract by a conveyance containing covenants or warranties except such as Reynolds has received from its grantor or grantors, and the title granted to Ford to such tract shall be subject to the same easements and restrictions as the title granted to Reynolds. If Reynolds causes such tract of land to be sold to Ford by the owner or owners thereof, the purchase price therefor shall be the price specified in the option or options held by Reynolds, plus all necessary documentary stamps, taxes and closing costs on such conveyance to Ford. In such case, the title to be granted to Ford shall be the title that Reynolds would have received if it had exercised its option or options to purchase the land from the owner or owners thereof. Reynolds grants to Ford such easements over its Alabama lands (including land now under option with respect to which options are exercised by Reynolds) as may be necessary for Ford to lay water and sewer mains to connect with Reynolds' water and sewage systems. Such mains shall be so located so as not to interfere with Reynolds' operations. Reynolds also agrees to furnish treated water and sewage service to Ford at mutually agreed upon reasonable rates. Although the Alabama Reduction Plant is to be constructed by Reynolds for the primary purpose of complying with its delivery obligations hereunder, no restriction is imposed or implied by this Agreement on Reynolds' right to operate and manage the plant in the manner determined by Reynolds and to sell or dispose of in any manner and to any parties it desires such quantity of the products of such plant, including molten metal, as Reynolds is not specifically required to deliver to Ford hereunder."

7. Except as hereby amended, all of the provisions of the Agreement shall continue in full force and effect for the term thereof.

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement duly to be executed as of the day and year first above written.

Attest:

REYNOLDS METALS COMPANY,
By FRED R. EDNEY,
Ass't Secretary.

FORD MOTOR COMPANY,
By D. S. HARDER,
Executive Vice President.

Attest:

CHRYSLER CORP.,

J. O. WRIGHT.

2 · Aluminum Pig and Ingot
GENERAL PRICE DATA AND PIG PRICES

Aluminum Pig and Ingot

GENERAL PRICE DATA

1. ORDER ACCEPTANCE: Orders are subject to acceptance by Alcoa at its principal office in Pittsburgh, Pennsylvania, and will be accepted only upon the terms and conditions shown on the face and reverse side of Alcoa's acknowledgment of order.
2. TERMS: Net cash 30 days from date of invoice, subject to the approval of the Treasurer, Aluminum Company of America, Pittsburgh, Pa.
3. DELIVERY POINTS: F.O.B. Shipping Point.
4. TRANSPORTATION ALLOWANCE CLAUSE: Alcoa will make an allowance for transportation charges, including the applicable transportation tax, on shipments within the Continental United States to the extent of, and in accordance with, the following. Shipment will be made, at Alcoa's option, either transportation collect, in which case the deduction of the transportation allowance will be shown on Alcoa's invoice, or transportation prepaid, in which case the amount of the transportation allowance will not be shown on Alcoa's invoice. In either case, transportation charges in excess of the amount properly allowable will be for the Customer's account. The allowance shall be the amount of the actual transportation charges, but, unless the shipment is subject to Alcoa's right to select the agency of transportation and determine the routing, the allowance shall not exceed transportation charges based on the applicable rail or truck freight rate, whichever is lower. Notwithstanding the provisions of any transportation allowance clause, where material is picked up by customer at Alcoa's point of shipment, the transportation allowance shall be the allowance which Alcoa would have made if customer pickup had not been requested, excluding, however, any transportation tax.
5. CHANGE OF PRICE: The prices and charges for materials and other items shall be adjusted to, and the materials will be invoiced at, Alcoa's prices in effect at time of shipment.

ALUMINUM PIG

"PIG" IS THE PRODUCT OF THE ELECTRIC SMELTING FURNACES

Alcoa Unalloyed Pig

Unalloyed pig is available in either 50 or 700 pound size. The base prices and minimum aluminum contents of the standard grades are listed below:

Grade	Base price per pound
*99.50% minimum	$0.260
*99.80% minimum	0.265
99.85% minimum	0.270
*99.90% minimum	0.280
99.99% minimum	(A)

(A) Consult Product Manager.

QUANTITY EXTRAS PER POUND

10,000 pounds and over	Base
2,000 to 9,999 pounds	+$0.01
500 to 1,999 pounds	+ 0.025
Less than 500 pounds	+ 0.04

1. The quantity extra of each item of an order is determined by the total weight of that order released at one time for single shipment.

*Indicates change from previous issue.

Alcoa Alloy Pig

Alloy pig is available in 50 pound size. The base prices and approximate compositions of the standard alloys are listed below: Complete composition specifications are given on page 5.

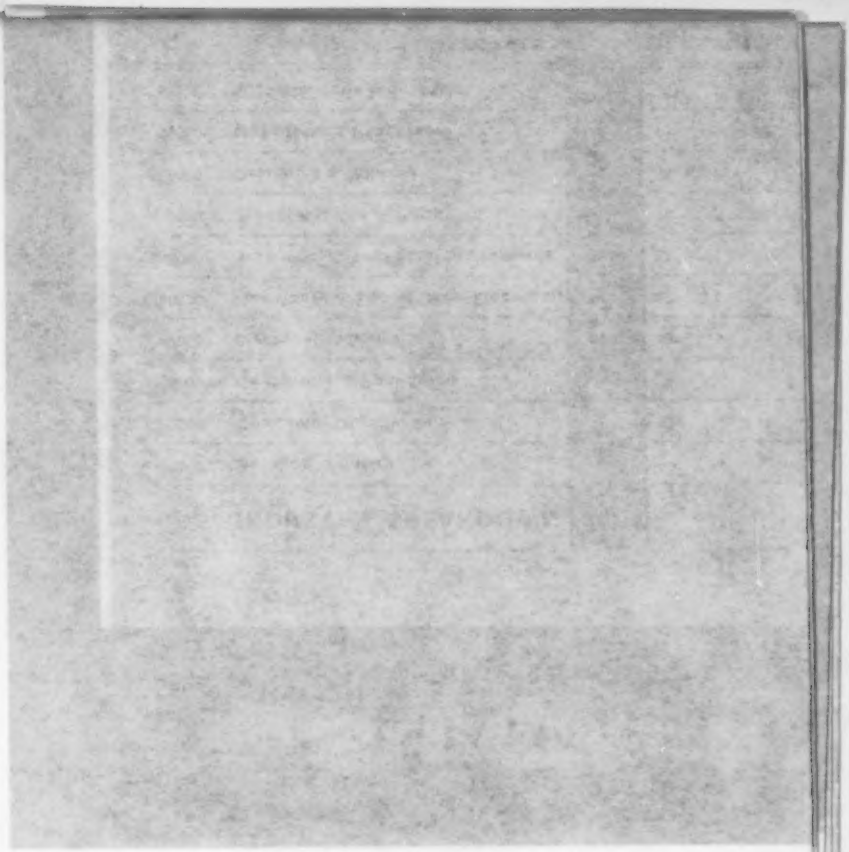
Alloy	Approximate composition	Base price per pound
2108	20% Copper	(A)
2312	12% Silicon	$0.265
A2312	12% Silicon	0.262
2314	5% Silicon	0.265
3402	7% Manganese	0.262
2509	10% Nickel	*0.320
2919	2.5% Chromium	0.280
E.C.	See page 5	0.265

KAISER ALUMINUM & CHEMICAL CORP.,
Washington 6, D. C., November 19, 1957.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3,
Select Committee on Small Business,
House of Representatives, Washington, D. C.

DEAR CONGRESSMAN YATES: During my testimony yesterday I was requested to furnish the committee the average hourly labor costs at our various plants throughout the country from June 1955 to date.

The following table shows the average hourly labor costs at Mead, Tacoma, and Trentwood, Wash., Halethorpe, Md., Newark and Heath, Ohio, Chalmette and Baton Rouge, La., in June of 1955 and after the wage increases which occurred in August 1955, August 1956, February 1957 and August 1957.



SUMMARY: by STATES and by RE

No.	INDUSTRY BREAKDOWN		Ala.	Ariz.	Ark.	Calif.	Colo.	Conn.	Del.	D.C.	Fla.	Ga.	Ida.	Ill.	Ind.	Ia.	Kan.	Ky.	La.
1000	Building Industry		90	24	42	471	58	148	17	23	306	96	16	517	228	80	80	85	93
2000	Consumer Durable Goods	1961	21	4	11	126	9	82	4	2	37	33	1	257	98	47	19	17	10
3000	Containers & Packaging		4		3	57	3	21	3	1	5	8		86	19	2	2	4	8
4000	Electrical Industry		13	5	9	166	4	94	5	1	16	19		309	77	17	11	18	3
5000	Machinery & Equip. (Non-Electrical)		17	6	7	163	12	82	1	1	19	26	1	364	91	66	22	19	17
6000	Scientific & Technical Instruments		1	1	1	69	11	45	2	2	17	7		146	26	6	12	3	2
7000	Transportation & Parts		19	10	12	254	16	65	9	2	38	22	4	146	88	28	29	7	8
8000	Ordnance & Military		5	1		29	3	4	1			1	2	2	5		1		1
9000	Light Metals Processors		63	7	38	505	42	254	13	5	116	63	7	754	266	78	50	41	25
100	Miscellaneous Industries		6	1	2	29	5	39	2		6	4		111	22	15	6	14	4
	TOTALS		239	59	125	1869	163	834	57	37	560	281	31	2902	918	349	232	208	171

			Neb.	Nev.	N.H.	N.J.	N.M.	N.Y.	N.C.	N.D.	Ohio	Okla.	Ore.	Pa.	R.I.	S.C.	S.D.	Tenn.	Te
1000	Building Industry		59	6	17	344	9	806	36	11	492	66	50	531	43	94	11	82	29
2000	Consumer Durable Goods	1961	1		3	57		263	27		180	6	8	139	10	13	1	26	3
3000	Containers & Packaging		9			37	1	72	3		82	3	3	39	3			4	1
4000	Electrical Industry		8		9	204	1	228	15		160	6	11	157	23	5		7	2
5000	Machinery & Equip. (Non-Electrical)		18	1	4	123		288	17	5	291	21	18	188	12	7	3	17	6
6000	Scientific & Technical Instruments		2		5	68		140	3		69	8	1	72	5		2	7	2
7000	Transportation & Parts		12	1	1	60	2	137	13	2	146	20	16	103	2	5	2	19	6
8000	Ordnance & Military		2			4	1	14			10			4	1			4	
9000	Light Metals Processors		24	1	27	334	8	730	47	1	883	48	42	540	79	28	5	68	17
100	Miscellaneous Industries		6	1	2	75		227	7		153	5	6	101	25	9	3	11	1
	TOTALS		141	10	68	1306	22	2905	187	19	2436	183	155	1874	203	121	27	245	70

No.	REGIONAL BREAKDOWN	New England	Middle Atlantic	South Atlantic	East North Central	West North Central	East South Central	West South Central
1000	Building Industry	436	1681	760	1759	706	281	481
2000	Consumer Durable Goods	155	459	184	725	175	73	61
3000	Containers & Packaging	48	148	44	198	50	12	30
4000	Electrical Industry	247	589	105	678	114	43	46
5000	Machinery & Equipment (Non-Electrical)	204	599	98	1065	271	58	107
6000	Scientific & Technical Instruments	113	280	51	323	54	13	32
7000	Transportation & Parts	123	300	143	708	142	53	101
8000	Ordnance & Military	15	22	17	22	5	9	5
9000	Light Metals Processors	656	1604	424	2663	451	184	289
100	Miscellaneous Industries	127	403	32	363	80	31	39
	TOTALS	2124	6085	1858	8507	2120	757	1181

EGIONS

	Mo.	Md.	Mass.	Mich.	Minn.	Miss.	Mo.	Mont.
	18	100	203	329	158	24	359	20
	2	23	53	111	52	9	55	1
	2	14	19	23	7		30	1
	3	23	116	77	21	5	57	1
	4	14	88	189	83	5	74	1
	1	13	55	59	13	2	19	
	13	31	38	265	26	8	43	
		7	10	5			2	
	25	56	256	503	99	12	204	2
	2	12	58	48	18		32	1
	70	293	896	1609	477	95	875	27

	Tex.	Utah	Vt.	Va.	Wash.	W.Va.	Wis.	Wyo.
	280	27	7	81	100	26	195	3
	34	1	5	15	14	9	82	2
	16		3	8	3	2	18	
	28	3	2	14	6	7	55	
	62		14	9	30	4	130	
	21	1	2	6	4	1	23	1
	61	6	4	18	40	5	63	1
	4			8	1			
	178	22	15	57	95	39	257	2
	18	1	1	8	8	4	29	
	702	61	53	225	301	97	852	9

Mountain	Pacific	States
163	621	[illegible]
18	148	[illegible]
5	63	[illegible]
14	183	[illegible]
21	211	[illegible]
14	74	[illegible]
40	310	[illegible]
7	30	[illegible]
91	642	[illegible]
9	43	[illegible]
382	2325	[illegible]

An Analysis of this Surve

WORK on this, the 5th survey of light metals consuming industries was begun when the last analysis was completed in 1955. In completing the last survey, Modern Metals' staff developed improved methods of obtaining and refining raw statistical data. They were put into effect immediately. The result is this market analysis—the most accurate and comprehensive survey of the light metals consuming industries yet published.

The starting point was the last survey's listing of 24,084 plants. In the past two years an intensive, day-by-day review has resulted in the removal of 4,400 plants from the original listing. (Main reasons for removal were either "out of business" or "no longer use enough light metals.") At the same time, 5,655 plants have been added to the list, resulting in the present total of 25,339 plants.

The basic criterion that governed the addition of names to the list was the ability of each plant to qualify as a processor or consumer of aluminum, magnesium or titanium. Of course, a plant's ability to qualify was definitely known in a large percentage of cases, but where there was doubt a questionnaire was sent. Over the past two years, some 62,300 plants were analyzed as to their consumption and, in order to qualify, each plant had to answer the questions and indicate that it uses substantial quantities of light metals.

Sources of new plant listings included: Clippings from national and regional newspapers and business publications; trade association membership lists; names supplied by light metals industry salesmen; and plants gleaned from 47 state industrial directories. These plants had to pass the questionnaire test to qualify for the survey. In addition, Modern Metals' circulation files were cross-checked with customer lists of a major aluminum producer and several light metals distributors. As a result, the questionnaire and cross-checking methods employed in this survey have produced two important results:

1. Virtually every major light metals processor and consumer is now on Modern Metals' list. 2. Most marginal users have been eliminated.

Trends are not easily charted in this type of survey, but here are some data that may indicate general directions of growth:

Western states (see cover) account for 15.3% of the total number of plants in the light metals consuming industries. Central states have 44.9% ; eastern states, 39.7% . The five largest states in number of plants are New York with 2905; Illinois, 2692; Ohio, 2436; Pennsylvania, 1874; and California with 1869 plants.

California showed the greatest numerical growth in the past two years with a gain of 261 plants. Ohio was second with 173 new ones; Pennsylvania third with 136.

But smaller states showed the largest percentage growth. North Dakota's number of light metals plants increased 58% ; New Hampshire, 44% ; Oklahoma, 37.5% ; South Carolina, 36% . Among the larger states, Texas showed a 12.3% increase. Others showing good gains include Minnesota, Massachusetts, Alabama, and Florida. The closest thing to a general movement might be greater growth in light metals consumer plants among the agricultural states of the South and West.

Of the ten major industry groups, the largest increase was by the Scientific and Technical group. This resulted from re-classification of some firms previously grouped under Miscellaneous. (This more accurate overall placement resulted in a decline of 679 plants in the Miscellaneous group.)

The biggest numerical gain was in the Building Industry —from 5622 plants in 1955 to 6950. Containers and Pack-

...his Survey

...ht metals consuming ...alysis was completed ...ey. Modern Metals' ...taining and refining ...effect immediately. ...most accurate and ...ls consuming indus-

...y's listing of 24,084 ...nsive, day-by-day ...00 plants from the ...al were either "out ...light metals.") At ...added to the list, ...plants.

...addition of names ...t to qualify as a ...agnesium or tita- ...dy was definitely ...where there was ...e past two years, ...eir consumption ...d to answer the ...antial quantities

Clippings from ...ness publications; ...supplied by light ...ed from 47 state ...pass the ques- ...ddition, Modern ...d with customer ...eral light metals ...nd cross-check- ...e produced two

...cessor and con- ...Most marginal

...of survey, but ...eral directions

...% of the total ...ing industries. ...7%. The five ...rk with 2905; ...74; and Cali-

...growth in the ...to was second ...136.

...ntage growth. ...nts increased ...; South Car- ...wed a 12.3% ...Minnesota, ...west thing to ...light metals ...of the South

...est increase ...his resulted ...ly grouped ...erall place- ...iscellaneous

...ng Industry ...and Pack-

aging showed a 44% gain; Transportation and Parts, 27%. The smallness of the increase (3%) among Light Metals Processors was due mainly to the more stringent requirements for qualifications in this survey. Many of the plants included in the last survey could not qualify this time because they use only small quantities of light metals. Counting the qualifiers, plus the new ones, the gain is probably more like 10%

Consumption

Aluminum: The 25,339 qualifying plants in this survey account for approximately 98.5% of the light metals consumed in the U.S. in 1957. Consumption of aluminum will total around 1.93 million tons by year's end. Here's where it is used:

INDUSTRY	No. of Plants	Thousands of Tons
BUILDING	6950	475
CONSUMER DURABLES	1981	270
CONT'RS & PACKAGING	598	165
ELECTRICAL EQUIP'T	2019	150
MACHINERY & EQUIP'T	2534	75
SCIENTIFIC & TECH.	954	35
TRANSPORTATION	1920	350
ORD. & MILITARY	132	20
L. M. PROCESSORS	7014	50
MISCELLANEOUS	1137	40

An additional 94,000 tons of aluminum is sold by distributors to a wide variety of users who are difficult to classify. The bulk of all aluminum sold is first converted into useful forms (wrought products, castings, etc.) by the Light Metals Processors group. But some members of this group also make end products, accounting for about 50,000 tons. Unidentified end users consume 30,000 tons, while exports amount to 16,000 tons.

In some product categories, increases in number of plants were great enough to merit special mention. Sheet metal fabricators, for example, showed a 50% gain to 1130 plants. Other noteworthy gains include: Windows, doors, etc., 43% increase to 1501; extruders and tube producers, 42.7% to 247; electronics, 38% to 570; die casting plants, 30% to 1050; and furniture, 25% to 548 plants.

Magnesium and Titanium: Magnesium's pattern of usage differs too radically from that of aluminum to be expressed in the same categories. For example, three non-structural uses account for over half of the 1957 estimated total shipments of 70,000 tons of magnesium. These uses are as a reduction agent in the titanium industry (27%); as an alloying agent in aluminum (20%); and in anodes (11%).

Structural uses of magnesium break down as follows: Aircraft and missiles, 15%; machinery, tools and materials handling equipment, 7.5%; consumer durables, 3.5%; ground transportation, 1.5%; and electronic equipment, 1.4%. About 2% of the magnesium is used in powder form, and nearly 1% goes into the graphic arts industry. Exports are an estimated 6%, and the remaining 5% went into unidentified uses. Of the replies to our survey, 1252 plants identified themselves as users of magnesium.

Since most of the titanium consumption goes into military uses, no attempt is made to determine end uses. Some 460 firms surveyed by Modern Metals reported as users of titanium.

Modern Metals
December 1, 1957

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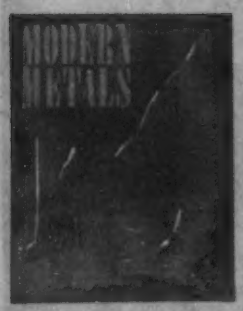

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CENTRAL STATES
EASTERN STATES
339 PLANTS
arket survey...
GHT METALS CONSUMING INDUSTRIES

THE LIGHT

NO.	WITHIN INDUSTRY BREAKDOWN	U.S. TOTALS	NEW ENGLAND							MID. ATLANTIC				
			Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals	N.Y.	N.J.	Pa.	Area Totals	Del.
1000	**BUILDING INDUSTRY**	8058												
1100	Awnings, blinds, louvers, canopies	827	5			9	5	10	29	30	18	23	71	
1200	Roofing, siding, shingles, etc.	1387			1	1		2	4	13	7	14	34	
1300	Air conditioning, heating, ventilating, ducts	5447	2	1		20	3	24	50	61	32	43	136	3
1400	Fabricators, architectural & ornamental	2950		2		63	15	35	115	121	104	134	359	5
1500	Fabricators, sheet metal	11,482	4	6	5	34	7	14	70	80	61	86	227	6
1600	Prefabricated buildings, mobile homes	831	1	1		4		2	8	5	4	11	20	
1700	Windows, doors, curtain walls, storefronts, screens, etc.	1501	3	2		47	13	37	102	111	30	103	244	3
1800	Misc.: Hardware, weatherstrip. insul., fittings, etc.	5911	3	5	1	25		24	58	35	25	49	109	
	STATE TOTALS →		18	17	7	203	43	148	436	606	344	553	1503	17
	CONSUMER DURABLE GOODS	4061	Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals	N.Y.	N.J.	Pa.	Area Totals	Del.
2100	Appliances, small: Irons, mixers, etc.	160				2		17	19	12	7	5	24	1
2200	Furniture: Outdoor, office, household, etc.	548	1			14	1	14	30	38	13	42	137	1
2300	Housewares, giftware, gadgets	215			3	9	5	15	32	32	8	18	58	
2400	Garden & lawn: Mowers, tillers, rakes, fencing, etc.	309	1	1		9	1	11	23	11	1	10	22	
2500	Refrig., freezers, washers, ranges, etc.	457				6	2	4	12	2	14	11	107	1
2600	Toys & sporting goods	176		1	2	11	1	17	32	29	4	22	55	1
2700	Utensils, all types	53		1		2		4	7	14	5	7	26	
	STATE TOTALS →		2	3	5	53	10	82	155	253	57	119	429	4
	CONTAINERS & PACKAGING	898	Me.	N.H.	Vt.	Mass.	R.I.	Conn	Area Totals	N.Y.	N.J.	Pa.	Area Totals	Del.
3100	Caps, closures, collapsible tubes	77					1	5	6	8	4	8	20	1
3200	Foil converters: Cosmetic, food, beverage, etc.	78				3		6	9	7	8	3	18	
3300	Containers, all types	536	1			10		3	14	38	74	32	144	2
3400	Shipping & luggage	28				1		1	2	3		1	4	
3500	Spools & reels	224	1		3		1		5	4		3	7	
3600	Drums, barrels, receptacles	40				1		4	5	9	4	9	22	
3700	Tanks, all types	85				2	1		3	3	2	12	17	
3800	Containers, household	35				2		2	4	5			5	
	STATE TOTALS →		2	0	3	19	3	21	48	78	37	69	184	3
	ELECTRICAL INDUSTRY	2019	Me	N.H	Vt.	Mass.	R.I.	Conn.	Area Totals	N.Y.	N.J.	Pa.	Area Totals	Del.
4100	Communications: Radio, TV, phone	469	1			16	2	11	30	60	78	54	192	1
4200	Electronics: Equipment & parts	370	1	7	1	55	5	28	97	37	44	41	143	1
4300	Electrical equipment, heavy	104		1		2		4	7	9	10	13	32	
4400	Electrical equipment, light	81				2	1	5	8	4	6	11	21	2
4500	Fixtures & fittings, incl. lighting	402	1	1		23	3	18	46	52	35	25	112	1
4600	Motors, heavy & light	189				7		7	14	15	7		22	
4700	Wire & cable	189			1	11	12	21	45	37	81	10	128	
	STATE TOTALS →		3	9	2	116	23	94	247	214	261	154	629	5
	MACH. & EQUIP. (NON-ELECT.)	2634	Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals	N.Y.	N.J.	Pa.	Area Totals	Del.
5100	Industrial, general purpose	319	2	1	5	22	1	12	43	30	27	14	71	1
5200	Engines	181			1	2	2	9	14	10	3	22	35	
5300	Mining & construction	80				2			2	6	3	4	13	
5400	Compressors, pumps, blowers, valves, etc.	449				20	3	19	42	14	23	28	65	
5500	Agricultural & dairy	380			4	5	1		10	17	8	18	43	
5600	Ladders & scaffolds	137				7	1	4	12	24	12		36	
5700	Materials handling	350	1	2	1	21	2	5	32	33	24	23	80	
5800	Office & store	224	1		1	3		17	22	40	4	14	58	
5900	Tools, portable & hand	314		1	2	6	2	16	27	21	12	13	46	
	STATE TOTALS →		4	4	14	88	12	82	204	256	122	158	536	1

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T METALS C

SOUTH ATLANTIC

Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
	12	1	8	5	8	18	17	51	120
	1	1	1	1	1		3	3	11
3	8	3	8	4	3	1	8	9	47
5	20	13	24	7	15	11	26	84	205
6	22	1	18	3	19	13	10	32	119
	9		3				4	15	31
3	23	3	19	3	4	7	21	104	187
	5	1	5	3	5	4	9	8	40
17	100	23	31	26	55	54	98	306	760

EAST NORTH CENTRAL

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals	Mont.
42	11	41	19	13	126	
13	5	7	3	6	34	
72	30	71	52	29	254	
112	40	145	72	52	421	2
62	62	79	25	22	250	17
10	22	23	32	11	98	
127	45	79	77	39	367	
54	11	72	49	23	209	1
492	226	517	329	195	1759	20

Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
1	3		2	1		3	1	1	12
1	5	2	8	5	20	8	21	21	89
	2		1		3		2		8
	4			2		1	5	7	19
1	4		1	1	2	1	2	2	14
1	5		4		2	2		6	20
							2		2
4	23	2	16	9	27	13	33	37	164

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals	Mont.
13	7	43	6	5	74	
36	36	50	34	10	166	1
27	7	23	18	16	91	
19	13	18	6	9	65	
43	24	67	26	32	192	
35	7	45	19	9	115	
7	4	11	2	1	25	
180	98	257	111	82	728	1

Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
1	2			1				1	5
			2		1			1	4
2	10		3	1	2				18
			1						1
								1	1
		1						1	2
	2		2				7	1	12
							1		1
3	14	1	8	2	3	0	8	5	44

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals	Mont.
1	2	12	2	1	18	
9		3	4	1	17	
27	9	37	6	7	86	
1		7		1	9	
4			3		7	
4	3	4	2	1	14	
5	4	15	4	6	34	
1	1	8	2	1	13	
52	19	86	23	18	198	

Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
1	4		5		4	2	3	3	22
1	15	1	5	3	5	1	2	6	39
	1		1		3		3	1	9
2			1			1	3		7
1	2		2	3	2	1	4	4	19
					1				1
	1			1			4	2	8
5	23	1	14	7	15	5	19	16	105

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals	Mont.
31	13	87	13	2	146	
30	26	81	29	13	179	
17	3	6	1	4	31	
3	4	9	3	1	20	
39	11	82	13	10	155	
27	12	19	14	22	94	
13	8	25	4	3	53	
160	77	309	77	55	678	

Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
1	1		4	1	4	5	5	4	25
							2		2
				1		1	2		4
	6	1		1	1		15	1	25
	1				4		1	4	10
	1						1	2	4
	2		1	1	4	1		1	10
			3		1			3	7
	3		1		3			4	11
1	14	1	9	4	17	7	26	19	98

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals	Mont.
93	7	54	24	18	196	
16	8	16	24	17	81	
5	6	8	2	6	27	
43	26	75	25	14	183	
32	16	39	27	40	154	
9	2	19	14	4	48	
38	8	28	35	12	121	
10		65	6	5	86	
45	18	60	32	14	169	
291	91	364	189	130	1065	

TALS CONSUM

EAST NORTH CENTRAL

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals
42	11	41	19	13	126
13	5	7	3	6	34
72	30	71	52	29	254
112	40	145	72	52	421
62	82	79	25	22	250
10	22	23	32	11	98
127	45	79	77	39	367
54	11	72	49	23	209
492	226	517	329	195	1759

MOUNTAIN

Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals
	1		3		3			7
								0
	2		1		3	1		7
2	5	2	31	3	12	12	4	71
17	6	1	8	1	4	11		48
			3	2	1	1		7
	2		9	1	1	2	1	16
1			3	2			1	7
20	16	3	58	9	24	27	6	163

WEST SOUTH CENTRAL

Ark.	La.	Okla.	Tex.	Area Totals
2	1		2	5
7	0	1	12	20
			7	7
1	2	3	3	9
1	1	3	5	10
		1	1	2
1	1	2	6	10
2	1	1	2	6
14	7	11	41	73

PACIFIC

Wash.	Ore.	Calif.	Area Totals
3	1	23	27
2	4	6	12
7	6	33	46
39	15	148	202
17	16	36	69
3	2	29	34
22	4	153	179
7	2	43	52
100	50	471	821

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals
13	7	43	6	5	74
36	36	50	34	10	166
27	7	23	18	16	91
19	13	18	6	9	65
43	24	67	26	32	192
35	7	45	19	9	115
7	4	11	2	1	25
180	98	257	111	82	728

Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals
			1					1
1	1	2			1			5
			2			1		3
			3		1			4
					1			1
			1		1			2
			2					2
1	1	2	9	0	4	1	0	18

Ark.	La.	Okla.	Tex.	Area Totals
2	1		2	5
7	0	1	12	20
			7	7
1	2	3	3	9
1	1	3	5	10
		1	1	2
1	1	2	6	10
2	1	1	2	6
14	7	11	41	73

Wash.	Ore.	Calif.	Area Totals
	1	9	10
2	1	30	33
4	2	19	25
	2	23	25
5	1	16	22
3	1	21	25
		8	8
14	8	126	148

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals
1	2	12	2	1	18
9		3	4	1	17
27	9	37	6	7	86
1		7		1	9
4			3		7
4	3	4	2	1	14
5	4	15	4	6	34
1	1	8	2	1	13
52	19	86	23	18	198

Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals
								0
			1					1
			1					1
			1					1
								0
								0
1				1				2
								0
1	0	0	3	1	0	0	0	5

Ark.	La.	Okla.	Tex.	Area Totals
1			14	15
				0
	5	1		7
		1		2
				0
		1	1	2
1	2		1	4
3	8	3	15	30

Wash.	Ore.	Calif.	Area Totals
		7	7
1		24	25
2	1	4	7
		6	6
			0
		4	4
	2	6	8
		6	6
3	3	57	63

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals
31	13	87	13	2	146
30	26	81	29	13	179
17	3	6	1	4	31
3	4	9	3	1	20
39	11	82	13	10	155
27	12	19	14	22	94
13	8	25	4	3	53
160	77	309	77	55	678

Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals
			2		1			3
				1	3	1		5
			1					1
						2		2
			1		1			2
								0
1								1
1	0	0	4	1	5	3	0	14

Ark.	La.	Okla.	Tex.	Area Totals
	1	2		3
1		1	10	12
2	1	1	3	8
			1	1
	1	2	11	14
5			1	6
			3	3
9	3	6	29	46

Wash.	Ore.	Calif.	Area Totals
1	1	32	34
2	4	57	63
	2	7	9
	2	16	18
2	2	29	33
1		14	15
		11	11
6	11	166	183

Ohio	Ind.	Ill.	Mich.	Wis.	Area Totals
93	7	54	24	18	196
16	8	16	24	17	81
5	5	8	2	6	27
43	26	75	25	14	183
32	16	39	27	40	154
9	2	19	14	4	48
38	8	28	35	12	121
10		65	6	5	86
45	18	60	32	14	169
291	91	364	189	130	1065

Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals
1			3		1			5
								0
								0
			2		3			5
			3		1		1	5
								0
	1							1
			2					2
			2		1			3
1	1	0	12	0	6	0	1	21

Ark.	La.	Okla.	Tex.	Area Totals
	1	2	8	11
	1	3	8	12
1	1	1	3	6
2	3	4	6	15
1	4	2	11	18
1	2	2		5
2	3	4	14	23
			8	8
		3	4	7
17	21	62		100

Wash.	Ore.	Calif.	Area Totals
6		13	19
4	1	10	15
1	2	9	12
1	1	46	48
9	9	17	35
2	1	12	15
4	2	25	31
		21	21
3	2	10	15
30	18	163	211

MING INDUSTRI

NO.	WITHIN INDUSTRY BREAKDOWN	U.S. TOTAL	NEW ENGLAND						MID ATLANTIC						SOUTH ATLANTIC						
			Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals						Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.
	SCIENTIFIC & TECHNICAL EQUIP.	954																			
3100	Measuring & controlling	269		2	1	23	4	10	40							3		2		2	
3200	Aircraft, navigation, vehicle	241	1	3	1	3		14	22						1	4		1		1	
3300	Laboratory & professional	123				7		12	19							4	1	2	1		
3400	*Safety equipment*	94				7	1	1	9						1	1		1			
3500	Orthopedic & medical appliances	90				8		2	10							1					
3600	Photographic & optical	170				7		6	13								1				
	STATE TOTALS →		1	5	2	55	5	45	113						2	13	2	6	1	3	0

NO.	TRANSPORTATION & PARTS	4920	Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals						Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.
7100	Aircraft, military & commercial	456	1			3	6	1	56	67						9		1	1	1	
7200	Hardware, aircraft & vehicle	119					3		1	4					1	1	1		1		
7300	Highway signs, bridge rails, light poles, etc.	44								0						1					
7400	Automobiles, buses, trucks	686	6	1	1	9		2	19						6	6		6	3	10	3
7500	Trailers & truck trailers	284					2		5	7						6	1	4		1	
7600	Marine: Ships, boats, etc.	295	6				14		1	21					2	6		5		1	
7700	Railroad	71								0						1		2			
7800	Bicycles, scooters, carts, etc.	66					4	1		5						1					2
	STATE TOTALS →		13	1	1	38	2	65	123						9	31	2	18	5	13	5

NO.	ORDNANCE & MILITARY	1132	Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals						Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.
3480	Weapons	24				6	1	3	10							1		2			
3483	Army	30				1			1						1	2		3			
3483	Air Force	19							0												
3483	Navy	12						1	1							1		2			
3483	Atomic energy & advanced weapons	56				3			3							3		1			
	STATE TOTALS →		0	0	0	10	1	4	15						1	7	0	8	0	0	0

NO.	LIGHT METALS PROCESSORS	7016	Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals						Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.
3361	Die casting plants	1050	2	3		31	6	43	85							5		4		1	
3362	Foundries, sand & permanent mold	3137	17	15	6	96	28	54	216						6	17		21	19	25	2
3363	Extruders & tube producers	941		1	1	5	4	4	15						2	1		2			
3364	Fabricators: Draw., form., stamp'g, etc.	2284	4	2	5	77	26	77	191						4	23	5	27		19	
3365	Finishers: Anodizing, plating, etc.	233	1	1		9	5	10	26							1		1	19	1	
3366	Forging, impact extruding plants	78				4		9	13												
3369	Fastener mfrs.: Screw machine shops, etc.	540	1	5	3	31	9	44	93							3		2		1	
3334	Reduction plants & smelters	97				3	1	7	11						1	2					
3369	Sheet, plate, foil mills	55						6	6							4			1		
	STATE TOTALS →		25	27	15	256	79	254	656						13	56	5	57	39	47	

NO.	MISCELLANEOUS INDUSTRIES	1137	Me.	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals						Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.
3900	Chemical & metallurgical	132				6		7	13						2				3		
3900	Manufacturing, special & misc.	446	2	2		25	23	10	62							1		4		7	
3900	Signs, nameplates, displays, frames	328				16	1	13	30							7		3			
3900	Metal specialty manufacturers	244			1	11	1	9	22							4		1	1		
	STATE TOTALS →		2	2	1	58	25	39	127						2	12	0	8	4	7	

IDUSTRIES, E

NEW ENGLAND

	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals
	2	1	23	4	10	40
1	3	1	3		14	22
			7		12	19
			7	1	1	9
			8		2	10
			7		6	13
1	5	2	55	5	45	113

SOUTH ATLANTIC

	Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
		3		2		2		3		10
	1	4		1		1			10	17
		4	1	2	1				2	10
	1	1		1				2	3	8
		1						2	2	5
			1							1
	2	13	2	6	1	3	0	7	17	51

	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals
1		3	6	1	56	67
			3		1	4
						0
6	1	1	9		2	19
			2		5	7
6			14		1	21
						0
			4	1		5
13	1	4	38	2	65	123

	Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
		9		1	1	1		1	10	23
	1	1	1		1			1	1	6
		1								1
	6	6		6	3	10	3	8	4	46
		6	1	4		1		7	12	31
	2	6		5		1		4	11	29
		1		2						3
		1					2	1		4
	9	31	2	18	5	13	5	22	38	143

	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals
			6	1	3	10
			1			1
						0
					1	1
			3			3
0	0	0	10	1	4	15

	Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
		1		2						3
	1	2		3						6
										0
		1		2				1		4
		3		1						4
	1	7	0	8	0	0	0	1	0	17

	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals
2	3		31	6	43	85
7	15	6	96	28	54	216
	1	1	5	4	4	15
4	2	5	77	26	77	191
1	1		9	5	10	26
			4		9	13
1	5	3	31	9	44	93
			3	1	7	11
					6	6
15	27	15	256	79	254	656

	Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
		5		4		1		6	11	27
	6	17		21	19	25	20	35	27	170
	2	1		2			2	6	13	26
	4	23	5	27		19	5	13	51	147
		1		1	19	1		1	9	32
								1		1
		3		2		1	1	1	4	12
	1	2							1	4
		4			1					5
	13	56	5	57	39	47	28	63	116	424

	N.H.	Vt.	Mass.	R.I.	Conn.	Area Totals
			6		7	13
2	2		25	23	10	62
			16	1	13	30
		1	11	1	9	22
2	2	1	58	25	39	127

	Del.	Md.	D.C.	Va.	W.Va.	N.C.	S.C.	Ga.	Fla.	Area Totals
	2				3				1	6
		1		4		7	7	1		20
		7		3			1	3	3	17
		4		1	1		1		2	9
	2	12	0	8	4	7	9	4	6	52

BY STATES

EAST NORTH CENTRAL					EAST SOUTH CENTRAL					MOUNTAIN									WEST SOUTH CENTRAL					PACIFIC			
Ind.	Ill.	Mich.	Wis.	Area Totals	Ky.	Tenn.	Ala.	Miss.	Area Totals	Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals	Ark.	La.	Okla.	Tex.	Area Totals	Wash.	Ore.	Calif.	Area Totals
11	55	20	10	118	1	2		3	6				4					4			3	5	8	1		14	15
6	13	24	2	69		2			2			1			1			2	1		4	13	18	1		18	19
	23	4	2	33		1			1				1			1		2			1	1	2			16	16
3	9	5	3	30	1			1	2				2					2			1	2	3			6	6
4	17	4	2	36		1			1				2					2		1	1	2	4	2		5	7
	29	2	4	37	1				1				2					2							1	10	11
24	146	59	23	323	2	7	1	2	12	0	0	1	11	0	1	1	0	14	1	1	8	21	31	4	1	69	74

Ind.	Ill.	Mich.	Wis.	Area Totals	Ky.	Tenn.	Ala.	Miss.	Area Totals	Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals	Ark.	La.	Okla.	Tex.	Area Totals	Wash.	Ore.	Calif.	Area Totals
5	11	15	5	48	1	2	1		4			1	5	1	9	2	1	19		1	4	29	34	15	1	157	173
3	2	14	8	49	1	3			4				2					2	1		2	3	6			22	22
	3	1		12		1	1	1	3									0	1		1	2	4			7	7
39	66	165	20	347	1	5	7	4	17			3		3	1		4	11	2		8	10	20	11	10	19	40
29	25	38	11	115	4	3	1	6	14			1		5				6	2	3		14	19	6	1	38	45
7	13	22	13	67	5	4	3		12									0	4	1	2	2	9	8	2	9	19
4	18	2	3	40		2	1		3									0			3		3				0
1	8	8	3	30					0				1		1			2	3		1		4		2	2	4
88	146	265	63	708	12	25	13	11	61	0	4	1	16	2	10	6	1	40	13	3	25	60	101	40	16	254	310

Ind.	Ill.	Mich.	Wis.	Area Totals	Ky.	Tenn.	Ala.	Miss.	Area Totals	Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals	Ark.	La.	Okla.	Tex.	Area Totals	Wash.	Ore.	Calif.	Area Totals
		5		6					0				1	1				2				2	2			1	1
1	1			3		1			1									0				2	2			2	2
2	1			7			1		1				1					1					0				0
				1					0									0				1	1			3	3
2				5			2		2		2		1		1			4				1	1	1		23	24
5	2	5	0	22	0	1	3	0	4	0	2	0	3	1	1	0	0	7	0	0	0	1	1	1	0	29	30

Ind.	Ill.	Mich.	Wis.	Area Totals	Ky.	Tenn.	Ala.	Miss.	Area Totals	Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals	Ark.	La.	Okla.	Tex.	Area Totals	Wash.	Ore.	Calif.	Area Totals
32	137	127	24	418	3	4	3		10				13			2		15	11		4	21	36	4	12	166	182
93	170	147	92	759	16	20	13	8	57	2	3		11	2	2	8		28	14	13	26	40	93	32	22	106	160
7	13	19	3	87	1	3	2	4	10						1			1	3		2	1	6	5	1	13	19
97	242	108	109	879	55	69	30	3	157			4	1	13	5	2	12	37	5	11	13	41	70	46	7	119	172
13	48	28	5	123	2				2				2	1				3			1	3	4	3		26	29
4	6	9	1	29					0						1			1				2	2			11	11
17	121	63	23	328	2			1	3			1	3					4				1	1	4		43	47
2	11	2		31		1	4	2	7						1		1	2	6			1	7	1		11	12
1	6			9	1	2		1	4									0				3	3			10	10
266	754	503	257	2663	81	99	53	18	251	2	7	2	42	8	7	22	1	91	39	24	46	121	230	95	42	505	642

Ind.	Ill.	Mich.	Wis.	Area Totals	Ky.	Tenn.	Ala.	Miss.	Area Totals	Mont.	Ida.	Wy.	Col.	N.M.	Ariz.	Utah	Nev.	Area Totals	Ark.	La.	Okla.	Tex.	Area Totals	Wash.	Ore.	Calif.	Area Totals
2	3	9	1	30		1			1				1				1	2			1	5	7	1	2	2	5
6	28	18	9	129	2	1	3		13									0				8	8	6	3	2	11
6	36	15	11	127	3	3	3	2	11	1			2			1		4	2	2	2	5	9	1	1	18	20
8	44	6	8	77	2	1	1	1	5				2		1			3				1	1			7	7
22	111	48	29	363	14	11	8	3	36	1	0	0	5	0	1	1	1	9	2	5	3	18	28	8	6	29	43

This average cost computation is on a weighted average basis, as it pertains to the hourly rate of employees, and includes estimated pension costs.

June 1955	$2.482
August 1955	2.662
Do	2.894
February 1957	2.914
August 1957	3.064

The above figures represent the following percentage increases:

	Percent
June–August 1955	7.3
August 1955–August 1956	8.7
August 1956–February 1957	.7
February–August 1957	5.1
June 1955 through August 1957	23.4

Very truly yours,

D. A. RHOADES,
Vice President and General Manager.

CHRYSLER CORP.,
Detroit, Mich., December 19, 1957.

FRANK ROBERTS:

Please convey the following to Subcommittee No. 3, House Small Business Committee. It is Chrysler Corp.'s response to their question concerning increased wage rates since 1955:

Since January 1, 1955, a total of 31 cents has been added to the hourly wage rates of Chrysler Corp. employees, as provided for in the contract between the corporation and the United Automobile Workers. The 31 cents includes 18 cents added permanently to base wage rates, as provided for by the annual improvement factor for increased productivity, and 13 cents has been added in cost-of-living allowances, as provided for by the escalator agreement, based on the Bureau of Labor Statistics Consumer Price Index.

VANCE JOHNSON.

FRANK ROBERTS,
Suite 1306 K Street NW., Washington, D. C.:

Please convey to Subcommittee No. 3, House Small Business Committee, the following information which Chrysler Corp. was asked to supply for the record in conection with recent hearings on uses of aluminum:

Supplies of aluminum or aluminum parts, according to number of employees and aggregate amounts paid for aluminum and aluminum parts in 1956 and 1957

Number suppliers	Number employees	1956 aggregate	1957 aggregate
4	Less than 100	$1,948,000	$2,248,000
9	100 to 250	3,974,000	6,642,000
9	251 to 500	4,577,000	8,405,000
14	500 and over	35,019,000	51,159,000

NOTE.—Unknown to us are number of employees of three suppliers from whom we purchased an aggregate amount of $1,871,000 in 1957. Two of these did not supply Chrysler in 1956; purchases from one in 1956 aggregated $552,000.

VANCE JOHNSON.

ALUMINUM COMPANY OF AMERICA,
Pittsburgh, Pa., January 2, 1958.

Re hearings of Subcommittee No. 3 on Minerals and Raw Materials of the Select Committee To Review the Situation of Small Business in the Aluminum Industry

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3,
House Select Small Business Committee,
House of Representatives, Washington, D. C.

DEAR MR. YATES: In response to requests made at the hearing of your committee on November 18, we are submitting the following information.

Hourly wage rates.—In May 1955, when your committee was conducting its study of the aluminum industry, the average hourly wage cost at Alcoa's smelting plants was $2.51. Following the most recent round of wage increases, in the summer of 1957, the average cost at the same plants had increased to $3.13 per hour. The latter figure is an average of the months of August and September 1957.

Primary metal consumption.—In the recent hearing you mentioned that your staff had computed, from the charts prepared during your earlier hearings, that Alcoa had consumed 69 percent of its primary aluminum production in 1954 for its own purposes and asked us to confirm its accuracy. We do not believe that the percentage has been correctly computed as explained below.

On August 19, 1955, we submitted to your subcommittee certain data covering Alcoa's metal supply and distribution in tables captioned "Revised Table 1" and "Revised Table 2." These tabulations reported a primary aluminum production of 1,332 million pounds for the year 1954, with 922 million pounds "processed in fabricating plants or added to inventories" during that year. The latter figure is 69 percent of Alcoa's primary production; but it is incorrect to compute a percentage in this way because it ignores metal inventory fluctuations and purchased metal among other relevant factors.

We feel that the answer to your question concerning Alcoa's utilization of aluminum for its own operations should really be determined by the relationship between the weight of metal converted into fabricated products and the company's total metal supply for the same period. Revised tables 1 and 2, referred to above, were originally submitted to your subcommittee with our letter of June 9, 1955. Reference to the earlier table 2, "Distribution of total supply by years, indicates that of the 922 million pounds which were processed in fabricating plants or added to inventories in the year 1954, there were 118 million pounds sold by us as primary metal in other than pig or ingot form to nonintegrated users. In this same year there was an overall addition to Alcoa's metal inventories of 2 million pounds. The net metal usage for conversion to fabricated products, therefore, was 802 million pounds. This metal was drawn from the company's total metal supply, which consists not only of the primary production from the company's smelting plants, but also purchased primary aluminum, the recoverable content of purchased scrap, and metal handled under toll or conversion arrangements. The company's total metal supply in 1954, as shown on table 1 and on revised table 1, was 1,590 million pounds. The company's use, therefore, of 802 million pounds for its own finished fabricated products was approximately 50 percent of its total metal supply in 1954.

The following tabulation provides the figures for the years 1950 through 1956, and the first 10 months of 1957, on the basis described above. For the earlier periods these percentages could be derived directly from the data submitted to the subcommittee in 1955, except that the metal added o or withdrawn from inventories has been recognized in determining the amount of meal processed in Alcoa's fabricating plants. The determination of these net inventory changes has delayed our response to your questions, and we hope that this has not been a source of inconvenience to you.

Distribution of Alcoa's metal supply

	Percent of total metal supply processed into finished Alcoa products	Balance available for sale to non-integrated producers (percent)
1950	76	24
1951	70	30
1952	73	27
1953	62	38
1954	50	50
1955	65	35
1956	53	47
January through October 1957	54	46

Please let us know if there are any points in connection with these figures which have not been made clear.

Best regards.

Yours sincerely,

D. WILMOT, *Vice President.*

FORD MOTOR CO.
Dearborn, Mich., January 6, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3 on Minerals and Raw Materials,
Select Committee on Small Business of the House of Representatives,
Washington, D. C.

DEAR CONGRESSMAN YATES: With reference to my appearance before your subcommittee on November 19, 1957, I am setting forth below the additional items of information which were requested by members of the subcommittee:

1. The subcommittee asked us to furnish information with respect to the requests by Ford in 1955 for proposals to supply aluminum to it (transcript, pp. 292–293). Preliminary discussions concerning the possibility of purchasing aluminum in molten form were held by Ford representatives with representatives of the three domestic primary producers of aluminum, Aluminum Company of America, Kaiser Aluminum & Chemical Corp. and Reynolds Metals Co., and with representatives of two leading smelters, American Smelting & Refining Co. and Apex Smelting Co. These discussions were held early in 1955. At that time we were requesting proposals for the furnishing of molten aluminum at a rate of approximately 18 to 24 million pounds per year.

I also mentioned that I did not take part in these negotiations. Since my appearance, however, I have reviewed our records concerning the negotiations with these companies and have discussed the situation with my associates. All of the companies, except Aluminum Company of America, made proposals to supply aluminum to Ford. With respect to American Smelting and Apex, I am informed that their representatives were invited to visit Ford's offices to discuss the possibility of their supplying molten aluminum for a prospective aluminum die casting plant to be constructed by Ford.

The negotiations with American Smelting & Refining Co. and Apex Smelting Co. contemplated the furnishing of secondary aluminum in molten form. American Smelting & Refining Co. tentatively proposed to erect a smelting plant adjacent to any location which Ford Motor Co. deemed most suitable for its die-casting plant, and to furnish molten aluminum, if the other terms of its proposal were acceptable. Apex Smelting Co. tentatively proposed either to sell to Ford a plot of land located within 1 mile of its smelting plant at Cuyahoga Heights Village, Ohio, or to construct, in the Chicago area, a new smelting plant adjacent to a die-casting plant to be constructed by Ford, and to furnish molten aluminum, if the other terms of its proposal were acceptable. Alternate proposals for the furnishing of pig or ingot aluminum were also considered.

After reviewing the proposals which had been made to supply molten aluminum to Ford, it was considered that the proposal of Reynolds was the most advantageous. As a result of further negotiations with Reynolds, it was decided to contract with it for the purchase of molten aluminum in base annual quantities of 64 million pounds.

2. With reference to the request by the subcommittee for further information concerning the method of transporting molten aluminum, the Ford Motor Co.

die-casting plant is located approximately one-half mile from the Reynolds smelting plant in Listerhill, Ala. Reynolds prepares alloys to our specifications in carbon-lined iron pots generally used for the production of aluminum. Molten alloy is siphoned by Reynolds from the pots at 1,700° to 1,800° F. into crucibles, skimmed, and then transferred to Ford ladles for transportation by Ford to the Ford die-casting plant.

The ladles are owned by Ford Motor Co. They are covered and insulated, but are unheated. The truck-trailer vehicles which are used for transporting the ladles are owned by Ford and travel at approximately 20 miles per hour. Each truck can transport two 5,000-pound capacity ladles.

I am advised that the molten aluminum alloy currently being used by Ford is at a temperature of approximately 1,450° F. immediately after it is placed in Ford's ladles and that it will begin to solidify if it is permitted to cool to approximately 1,100°. If other alloys are used, these temperatures will vary to some extent. Depending upon the exterior temperature, the ladles used by Ford should be emptied approximately 1 hour after they are filled. About 15 minutes is required to empty each ladle at the Ford plant and normally they are emptied one at a time. Consequently, a truck carrying 2 ladles should travel not more than about 30 minutes, or approximately 10 miles. If the truck carried only 1 ladle, it could travel for about 45 minutes, or 15 miles.

From a purely technological standpoint, it would be possible to construct a truck with heating apparatus and additional insulation which would permit molten aluminum to be held in ladles for longer periods than 1 hour, but it is questionable whether such an operation would be economically feasible.

3. The subcommittee also requested that we furnish information as to the percentage increase in hourly wages at Ford Motor Co. from 1955 to 1956 and from 1956 to 1957 (transcript, pp. 306–308). From 1955 to 1956, the gross average hourly wage (including fringe benefits) paid by Ford Motor Co. to or on behalf of its hourly rated employees increased from an average of $2.77 for the calendar year 1955 to an average of $2.96 for the calendar year 1956, an increase of approximately 7 percent. The gross average hourly wage of $2.96 for 1956 increased to an estimated level of approximately $3.14 as of the time of the hearings in November 1957, an increase of over 6 percent. An overall average for the calendar year 1957 is not yet available.

4. The subcommittee requested that we supply a breakdown of our suppliers in various categories, depending upon the number of employees of the suppliers involved (transcript, p. 99). The reference made to prior testimony of representatives of other companies indicated that the subcommittee was interested in information pertaining to suppliers of aluminum parts.

The following table indicates the number of our suppliers of aluminum parts in categories, depending upon the number of employees of the suppliers involved and the approximate value of the purchases from the suppliers in each category for automobiles, trucks, and tractors produced by Ford Motor Co. during the model years 1957 and 1958.

Number of employees	Model year 1957		Model year 1958	
	Number of companies	Approximate value of purchases	Number of companies	Approximate value of purchases
Less than 100	13	$3,139,000	14	$2,078,000
100 to 250	8	1,306,000	9	2,327,000
251 to 500	10	4,101,000	8	3,209,000
Over 500	35	43,652,000	42	45,157,000
Total	66	52,198,000	73	52,771,000

The above information is given for model years rather than calendar years, because our purchase parts records are kept on a model year basis rather than on a calendar year basis.

Although a model year with respect to purchases by some divisions of the company may begin as early as May or as late as November, the model year 1957 includes purchases made principally during the period from the beginning of September 1956 to the end of August 1957, with most of the commitments for the 1957 model year having been made with our suppliers sometime during the calendar year 1956. The model year 1958 similarly encompasses purchases made

and to be made principally during the period from the beginning of September 1957 to the end of August 1958, with most of the commitments having been made with our suppliers sometime during the calendar year 1957. Figures for the model year 1956, most of the commitments for which were made during the calendar year 1955, are not available to us without the expenditure of considerable time and money.

The figures in the column of the table representing the approximate value of purchases for the model year 1957 have been derived from statistical material which is based on the company's production plans for such year, and represent as close an approximation of the actual value of such purchases as can reasonably be obtained from the records available. The figures in the comparable column for the model year 1958 represent an estimate of the amounts that will be purchased during such year, developed upon a similar basis.

In order to make the information presented in the table more meaningful and to avoid distortion, we have included in the statistics the full value of parts composed principally of aluminum, but have excluded therefrom certain assemblies, such as radios and clocks, where the aluminum content is very small by comparison to the value of the assembly. With regard to assemblies, such as brakes and carburetors, which contain more significant or more measurable amounts of aluminum but which are not composed principally of aluminum, we have included only the estimated value of the aluminum components rather than the value of the entire assembly.

It might be of interest to the subcommittee to know that with respect to the purchases shown in the above table from suppliers having more than 500 employees, a large proportion of such purchases consists of assemblies. Component parts of these assemblies containing aluminum in many instances are purchased in turn by our suppliers from other companies who, in effect, become our subsuppliers. Although we do not have specific information as to the identity of the subsuppliers from which these purchases are made, it is believed that if such information were available it would show that the proportion of parts containing aluminum thus being furnished indirectly by companies in the smaller supplier categories is far greater than the proportion of such parts purchased by Ford directly from small suppliers, as indicated in the above table.

Very truly yours,

E. G. WARD,
Vice President, Purchasing.

THE ANACONDA CO.,
New York, N. Y., April 14, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3, Select Committee on Small Business,
House of Representatives, Washington, D. C.

MY DEAR CONGRESSMAN YATES: I am pleased to furnish additional data covering the points you have requested supplementing my statements before your committee on March 13, 1958:

1. Reference is made to the mill costs of our reduction plant operations at Columbia Falls, as compared to the mill costs of Alcoa, Reynolds, and Kaiser, as they appear in the case of *United States* v. *Aluminum Company of America*, in 153 Federal Supplement, page 185. It is our belief that in 1956 our mill costs are comparable with those of Kaiser with the possible exception that Columbia Falls total operating costs, before depreciation, interest, and other charges, are approximately 6 percent higher due to our purchase of alumina from outside sources.

Based on the second 6 months of 1957, our mill costs at Columbia Falls increased 12.8 percent over the average cost for the year 1956.

2. Enclosed herewith for the supplement information of your committee is a copy of a letter dated December 12, 1951, by Mr. Manly Fleischmann, Administrator, Defense Production Administration, addressed to the Honorable Oscar L. Chapman, Secretary of the Interior, bearing upon the amendment of the tax amortization certificate issued to Harvey Machine Co., substituting in its place and stead Anaconda Aluminum Co. Also enclosed is a photostat of a letter dated February 18, 1953, from Mr. Joseph Rand, Director, Post-Certification Division, Defense Production Administration, addressed to the Commissioner of Internal Revenue, directing the Commissioner that the subject certificate is hereby amended by striking out Harvey Machine Co., Inc., of Montana, as applicant, and substituting in its place and stead Anaconda Aluminum Co. I believe that

these two letters will describe the background of such amendment of the certificate for account of Anaconda Aluminum Co.

3. With reference to sales of primary aluminum for account of Anaconda Aluminum Co. to customers outside the United States, I find that in 1956 we delivered 400 tons of primary metal to Banco Central de Chile, with an additional 100 tons delivered to Chile for account of Banco Central de Chile for the year 1957. These metal sales were effected at the published price of primary metal in effect at date of shipment.

I have found that during 1956 and 1957 no shipments were made to Mexico. Instead, 111 tons of primary pig were shipped in March 1958 to Conductores Electricos—a Mexican corporation affiliated with Anaconda Wire & Cable Co. I was under the impression that some shipments had been made to Conductores Electricos in 1956 and 1957, which I find now not to be the case.

Consequently, our shipments to Chile for the account of Banco Central de Chile in 1956 and 1957 are the only sales made for the account of Anaconda Aluminum Co. to customers outside the United States.

4. We are unable to break out our sales to sundry outside customers having 500 employees or less.

In this general connection, I wish to point out that in 1956 and 1957 we have made shipments to Hokin Aluminum Co., who were acquired by Kaiser, I believe, in November 1956. Also, we have delivered metal from Columbia Falls to Olin Mathiesson Chemical Corp. and Revere Copper & Brass, Inc., who will shortly become primary producers.

With these exceptions all sales of primary metal to sundry customers have been delivered to "nonintegrated" users, following the definition laid down in the GSA "put" contracts which defines a "nonintegrated" user as "* * * any manufacturer, fabricator, finisher, or producer of aluminum in the United States who is not a producer of primary aluminum or an affiliate or subsidiary of such producer * * *."

I trust that these supplemental data will answer the questions you raised, and upon which I was unable to give you definitive answers without further inquiry.

Yours very truly,

C. JAY PARKINSON,
General Counsel.

DEFENSE PRODUCTION ADMINISTRATION,
Washington, D. C., December 12, 1951.

HON. OSCAR L. CHAPMAN,
Secretary of the Interior,
Washington, D. C.

DEAR MR. CHAPMAN: I have received your letter of November 21, expressing your views with respect to the proposed construction of an aluminum reduction plant at Kalispell, Mont., by a company to be owned by Anaconda Copper Mining Co. and the Harvey Machine Co., of California. I have also consulted with and received the views of the Department of Justice on this matter.

The Defense Production Administration is charged with the responsibility of seeing to it that sufficient aluminum production and fabricating facilities are brought into being to serve the defense effort and, to the extent required, essential civilian needs of the country. Pursuant to this responsibility, and working in cooperation with Defense Minerals Administration, and later Defense Materials Procurement Agency, DPA has planned a very large expansion in the aluminum industry. There have been, however, very serious delays in the implementation of this program, the effect of which has been to constrict further the supplies of metal for defense and essential civilian needs. Within the last few days, the military services have placed before us substantially larger requirement figures than has heretofore been established. These requirements have increased the necessity for speeding up in every way possible the construction program for providing aluminum and may, in fact, require us to seek additional sources of supply as rapidly as possible. Based on facts known to me today, there is very grave risk that aluminum may become the controlling bottleneck in the carrying out of the defense program, particularly the aircraft program.

As you are well aware, a number of applicants have been considered for the use of Hungry Horse power for aluminum production. The proposed entry

of a subsidiary of Anaconda in which the Harvey Machine Co. would have an interest is clearly the best arrangement from the Government's point of view, for the following reasons:

1. It is, in my considered judgment, the quickest way to add any appreciable amount of metal to our supply. Hungry Horse power will become first available in October or November 1952. If Anaconda is given appropriate assistance in priorities, one potline may be completed in that time with two others following at from 45- to 60-day intervals. I feel sure that if we should attempt to introduce some acceptable alternate applicant in place of Anaconda with or without participation by Harvey, much vital time would be lost in the search for the applicant, in negotiation, in seeking financing and perhaps even in litigation. We cannot, in the interest of the aircraft program, afford to take the risk of a further loss of time.

2. The Government will not have to provide any financial assistance in the form of either loans or guaranties, but only the privilege of rapid tax amortization on a basis similar to that extended other participants in the expansion program. This cannot be said of any other known applicant for this power.

3. Anaconda does not request permission to construct any large aluminum fabricating facilities as a part of its proposal. Accordingly, there would be no further burden upon scarce materials and equipment. The most likely alternate to Anaconda for the Hungry Horse power would, however, only be interested if permission were granted to construct large and expensive fabricating facilities as part of the arrangement. The facilities contemplated in this case are of a variety expansion of which, in our judgment, is not required at present, and consequently we can see no present justification for extending the Government assistance that would be necessary to implement the construction of such fabricating facilities.

4. While, of course, Anaconda has no monopoly on industrial skill, there is no doubt in my mind that of all the applicants for this power, Anaconda has the highest degree of competence in metallurgical fields. This is particularly important, in my opinion, with respect to the speed with which the facilities can be put into operation.

You have expressed the view that the awarding of an adequate power contract to a subsidiary of Anaconda will not promote competitive business within the context of the President's directive of September 28, 1950. I do not agree with your conclusion in this case. It seems to me obvious that the entry into the aluminum business of a capable company possessed of large resources will, on the contrarry, substantially increase the competitive forces in the aluminum industry. When it has metal available, Anaconda will be forced actively to pursue customers now being served, albeit incompletely at present, by the four primary producers (including Alcoa) who are indeed active competing with each other. If it fails in this effort, it stands to suffer heavy losses. It is inconceivable to me that the experience and skill of this successful company in the metallurgical field will not be keenly and actively devoted to establishing its position in the aluminum industry in competition with existing producers. It should be pointed out that Anaconda will, by all odds, be the smallest of the aluminum producers. It will, in fact, produce less than 4 percent of the estimated total supply from domestic sources.

As you know, Anaconda and Harvey have been fabricators of aluminum for some time, drawing their supplies from existing sources of metal. In this respect, both companies have been in the same dependent position as the other fabricators who do not have controlled sources of metal. This facility will, therefore, assure to at least two important fabricators of aluminum a continuing source of metal after Government controls of distribution have been lifted.

The allegation has been made that since aluminum can be and is being substituted for copper in many applications, it would be in Anaconda's interest, with its important position in the copper business, to discourage this substitution because of the impact on the market for copper. This argument seems to me entirely fallacious for a number of reasons. In the first place, it is widely recognized that the world supplies of copper and the potential additional supplies which may be developed in the next decade or more will prove to be seriously short of the rapidly increasing world demand for the metal. Accordingly, it seems self-evident that (except during periods of depression) the available world supplies of copper will find adequate markets in those applications where no substitution of other metals is possible or economical. In the second place, competition in the aluminum industry, particularly that which is likely to exist

in the postdefense period, will, in my opinion, necessitate concentration upon new uses of aluminum not only in substitution for copper but for a wide variety of other materials, including tin, zinc, stainless steel, wood, and doubtless many others. It will be recalled that even those most familiar with the metal were widely in error in underestimating the post-World War II demand and fields of application which were generated by economic and technical forces. I should point out that the United States is in a very vulnerable position with respect to supplies of tin, zinc, and particularly certain ferroalloys utilized in alloy steels. Aluminum, on the other hand, can be produced from nearby if not domestic raw materials on an almost indefinitely increasing scale.

For the reasons set forth, therefore, I am advising the Anaconda and Harvey officials that we are prepared to receive and consider favorably an appropriate amendment to the tax amortization certificate covering the proposed reduction plant at Kalispell. I am also advising the Reconstruction Finance Corporation that I am withdrawing the previous certification given to it with respect to the Harvey Machine Co.'s application for a loan of $46 million. I am also advising the Administrator of GSA of this decision so that he may be guided accordingly with respect to any equipment which Harvey may have on order.

I request you promptly to enter into a suitable long-term contract with the proposed new producer for power from the Hungry Horse project.

I cannot emphasize to you too strongly the necessity of rapidly proceeding with this facility. The needs of the military services require this metal at the earliest possible time.

Mr. C. E. Wilson is aware of these decisions and the contents of this letter, and approves them.

Sincerely yours,

MANLY FLEISCHMANN, *Administrator.*

DEFENSE PRODUCTION ADMINISTRATION,
Washington, February 18, 1953.

Subject: TA–17411, Issued to: Harvey Machine Co., Inc., of Montana, 19200 South Western Avenue, Torrance, Calif.

THE COMMISSIONER OF INTERNAL REVENUE,
Bureau of Internal Revenue,
Washington, D. C.

DEAR SIR: Pursuant to the provisions of section 4 (k) of DPA Regulation No. 1, as amended, prescribed by the Defense Production Administrator with the approval of the President, sufficient cause appearing, subject certificate is hereby amended by striking out and deleting from said certificate, the appendixes, and other attachments thereto, wherever it may appear the name of applicant: Harvey Machine Co., Inc., of Montana, 19200 South Western Avenue, Torrance, Calif., and substituting in its place and stead the following: Anaconda Aluminum Co., 25 Broadway, New York 4, N. Y.

Sincerely yours,

JOSEPH RAND,
Director, Post-Certification Division, Office of Construction and Resources Expansion.

KAISER ALUMINUM & CHEMICAL CORP.,
Oakland, Calif., April 29, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3, Select Committee on Small Business,
House of Representatives, Washington, D. C.

DEAR CONGRESSMAN YATES: In reply to your letter of April 16 regarding our reduction in the EC redraw rod price, we wish to advise you that the conclusions drawn by Southwire are incorrect. This price revision will materially assist small business and will provide a substantial number of wire fabricators with an additional opportunity to use aluminum in new markets.

The revised redraw rod price will make it possible to use aluminum in competition with copper in building wire, in the electrical appliance market, in the electrical apparatus market, and in the manufacture of such applications as magnet wire, transformer windings, and communications cable. There are some 30 suppliers in the building wire field alone.

In 1955, we forecast that within the next 10 years aluminum usage in these markets would increase over 800 percent. With the drop in the price of copper, however, the growth of aluminum in these markets virtually ceased. Most of the manufacturers of these products produce them from EC redraw rod and the revision in the redraw rod price will therefore provide a strong impetus for renewed growth in these fields.

The reduction in the redraw rod price was also necessary to maintain the competitive position of nonintegrated cable manufacturers who produce cable from redraw rod. Many of these producers are small-business men. A few cable manufacturers, including Southwire, use aluminum pig as their starting raw material and produce their own redraw rod by the use of a continuous casting machine called a Properzi machine. The production of cable from redraw rod at the redraw rod price in effect prior to our recent revision was not competitive with the Properzi process and consequently producers who did not have their own Properzi machines and who purchased redraw rod were at a disadvantage. As a result, the redraw rod market was rapidly drying up. In 1957 our redraw rod sales were only one-third of our 1956 redraw rod sales.

Last fall Southwire initiated a drop in wire and cable prices and we received requests from nonintegrated cable producers to reduce our price of EC redraw rod. The present reduction meets this demand and will materially assist the many nonintegrated cable producers who use redraw rod as their starting raw material. As an example, we are attaching a copy of an unsolicited letter from Central Cable Corp., a nonintegrated producer of covered or insulated wire, stating that the revised price will be extremely helpful to them.

The revised price also takes into consideration the recent reduction by 2 cents per pound in the price of aluminum pig.

With respect to the statement of Southwire that the new redraw rod price eliminates them from the redraw rod market, it is apparent from the 66⅔ percent drop in the redraw rod market in 1957 that this market would become nonexistent if former price schedules were continued. Participation in a vanishing market would be of no benefit to any producer.

Actually, we believe if you will ascertain from Southwire the quantity of redraw rod sold by them in the domestic market and the prices at which they made such sales, you will find that Southwire is not in the redraw rod business. Basically, Southwire is in the cable business and any sales of redraw rod made by Southwire were, to the best of our knowledge, purely incidental. We believe that Southwire's real objection to the new redraw rod price is that as a cable producer using the Properzi process they will not longer have the same competitive advantage formerly held over the cable producer who uses redraw rod as his starting raw material. While this advantage may be lost, we believe that Southwire, along with all other wire producers, will gain from the impetus given the use of aluminum in new electrical markets as stated in the first part of this letter.

Very truly yours,

D. A. RHOADES,
Vice President and General Manager.

CENTRAL CABLE CORP.,
Jersey Shore, Pa., April 10, 1958.

Mr. D. A. RHOADES,
Vice President and General Manager,
Kaiser Aluminum & Chemical Corp.
Oakland, Calif.

DEAR MR. RHOADES: This is to report that Messrs. Niveling and Walker have just visited us in Jersey Shore and outlined Kaiser's new policy on EC redraw rods. We appreciated their coming to see us personally and feel that the step your company has taken in behalf of insulators like ourselves has been extremely helpful to us.

When we can get some more aluminum orders at profitable price levels, we promise to increase substantially our purchases of aluminum rods from your good company. We are looking forward to the arrival of this condition in our industry and want to thank you again for your consideration of our problem.

Very truly yours,

JOHN G. DETWILER, *President.*

SOUTHWIRE CO.,
Carrollton, Ga., June 6, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3, Select Committee on Small Business, House of Representatives, Washington, D. C.

DEAR CONGRESSMAN YATES: We have read Kaiser Aluminum's answer to our objection to their rod pricing and are still of the opinion that Kaiser's action will lead to a monopoly and will not assist small business in the majority, if not all, cases.

All the other aluminum producers indicate the unwiseness of Kaiser's rod pricing move and have not, to date, followed suit. It is inconceivable that everyone is out of step but Kaiser.

We do not feel that even with the new rod price, aluminum will take over a substantial part of the copper building wire market. There are many other considerations besides price involved. If aluminum was not substituted when aluminum rod was 28 cents and copper 50 cents, it is difficult for us to anticipate any great move to aluminum now when aluminum is 28 cents and copper is 28 cents. The decrease in rod price has not been passed on to the consumer level which certainly would be necessary to spur a move toward aluminum.

Kaiser's 1954–55 forecast was obviously incorrect and it is a ridiculous basis for a rod revision. It appears that they should have revised the forecast rather than the pricing structure. Kaiser is saying the redraw rod price is necessary to maintain the competitive position on nonintegrated cable fabricators who produce cable from redraw rod is also not factual. The facts are Kaiser has led in a price cutting on the cable that these small-business men produce to the point where they were eliminated from the market prior to the reduction of redraw rod to 28 cents per pound. In order for these producers to be competitive with the prices Kaiser is offering the finished material to their customers, the rod price would need to be less than 18 cents per pound.

Traditionally, the pricing structure between pig, rod, and cable was such that a conversion value was available in each step. The manufacturers who did not make their own rod could profit only on the drawing and stranding operation. Manufacturers who produce rod could profit on the rod operation in addition to the drawing and stranding operations which they perform and the integrated producers profit on the drawing and stranding, the rod operations and the conversion of bauxite to pig aluminum. As long as price structures were maintained, no one was at a disadvantage and each could profit in proportion to the amount of work performed on the production.

Under Kaiser's present pricing policies, all nonintegrated producers have been eliminated from the market. It has been Kaiser's sales policy to obtain volume regardless of price. After all independents have been eliminated, this can only result in monopoly. One of the keys to Kaiser's action is in their reference to their redraw rod sales drying up. These sales were drying up to producers who put in their own rod rolling facilities and from customers who chose Southwire and other nonintegrated suppliers' quality and service for Kaiser redraw rod. Having eliminated nonintegrated producers from the ACSR market, they chose to eliminate nonintegrated producers with rod mills from rod by taking a disproportionate amount of the drop from the rod spread.

Kaiser's paragraph in reference to Southwire's lowering cable prices is completely misleading. Southwire did publish a new price sheet last November that was lower than previous sheets published by 3 cents a pound; however, it was 3 cents a pound higher than Kaiser and other integrated producers were selling cable at that time. Southwire's price was established at a level that would permit all integrated and nonintegrated producers to survive. Kaiser published a new price sheet competitive with ours but continued to sell cable at lower and lower levels until at the present time, to the best of our knowledge, all nonintegrated producers have been eliminated from the competition.

Statistics do not agree with Kaiser's 66⅔ percent drop in the redraw rod market. This may be on Kaiser's rod sales but a shift was taking place in the aluminum industry with other rod producers entering the market. These newcomers; namely, Anaconda, Southern Electrical, Rome Cable, General Cable, Essex, and Southwire, all made capital investments for rod-rolling facilities. These investments have now been made worthless by Kaiser's trying to recapture the redraw rod market by unfair pricing means rather than by quality, a service and fair competition usually thought the basis of our free-enterprise system.

Another erroneous conclusion is that we are not in the redraw rod business. Actually, redraw rod sales represented a considerable portion of our aluminum volume. Southwire Co. is in more than the cable business.

Southwire Co. did not put in its redraw rod facilities for a competitive advantage over other nonintegrated producers but to be at a less disadvantage over integrated producers who have bauxite for their starting operation.

We believe that in the period since this price change that any increase in Kaiser's rod volume and cable sales has not been the result of any impetus given by the new cable price for new business but was at the expense of Southwire Co. and other nonintegrated producers who have been removed from the market.

Very truly yours,

ROY RICHARDS, *President.*

KAISER ALUMINUM & CHEMICAL CORP.,
Oakland, Calif., June 9, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3, Select Committee on Small Business, House of Representatives, Washington, D. C.

DEAR CONGRESSMAN YATES: On April 30, 1958, Mr. George M. Kagan of Kagan-Dixon Wire Corp., appeared before your subcommittee and commented on Kaiser Aluminum's reduction in our price for 5056 aluminum round drawn slide fastener wire sold to the slide-fastener industry. We would like to take this opportunity to state what action was taken by us on this matter and the reasons therefor, as well as to comment on the statement made by Mr. Kagan.

On November 22, 1957, Kaiser Aluminum reduced its base price for 5056 round drawn slide-fastener wire sold to the slide-fastener trade. This reduction was made solely for the purpose of meeting prices of competitors who were then selling below our price. Our reduction was 3½ cents per pound plus a reduction of one-half cent per pound in the annealing extra, to make the total effective reduction 4 cents per pound. In addition to this, the base price was applied to 5,000 pounds rather than 30,000 pounds. All of our customers, actual and potential, were notified of this price change.

Prior to this price reduction, our sales representatives calling on the slide-fastener trade reported that our then current prices were not competitive. Our competitors, including Kagan-Dixon Wire Corp., were selling below our price and were waiving all or part of the annealing extra, the quantity extra, and the tolerance extra. The total price at which competition was selling was about 4 cents per pound below our price. To meet this competition we lowered our price as outlined above.

On about November 30 we were informed that the Aluminum Company of America was quoting new prices that reflected a total deduction of 5 cents per pound under our previous price, or 1 cent per pound under our then current price. To meet this competition we lowered our price 1 cent per pound on December 26, 1957. At the same time we also changed the base quantity back to 30,000 pounds. This new price was also communicated to all of our slide-fastener customers and new price sheets were issued.

In response to a question Mr. Kagan said that he spoke to Mr. O'Halloran (M. J. O'Halloran, marketing manager, Rod, Bar & Wire) and Mr. Watson (J. W. Watson, general sales manager) of Kaiser Aluminum, who were alleged to have informed him that the reason for the price cut was that we were not getting our fair share of this business. Mr. Kagan was in fact told that the reason for the price cut was that our prices were not competitive and that as a result our overall participation in this market was not satisfactory.

"This market" is essentially in the New York area. All customers for slide-fastener wire, with one exception, are in this area so the New York market is essentially the entire market for the United States. In addition to Kaiser Aluminum, Arcola Wire, Nesor Alloys, General Cable, Alabama Wire, Scoville Manufacturing Co., United Wire & Supply, Reynolds Metals, Alcoa, and Kagan-Dixon all compete for this business. These firms do not compete in all products. Nesor Alloys, for instance is a purchaser of 5056 round wire and sells flattened wire and thus would be benefited by any price reduction in round wire.

Mr. Kagan also stated that our price reduction was arbitrary. We would like to again point out that we did not initiate a price reduction. We reduced our prices to reflect the prices our competitors, including Kagan-Dixon, were already charging, and since these November and December price reductions, some of our competitors, again including Kagan-Dixon, have cut their selling prices even below those levels.

Our redraw rod price is 43.9 cents per pound, which leaves a margin of 14.2 cents per pound between redraw rod and the most commonly used gage of 5056 round drawn slide fastener wire. We consider this margin reasonable and consider our price for redraw rod reasonable, both in itself and as related to other products.

If there is any further information that you or your staff desire with respect to this matter, we will be very happy to furnish it.

Very truly yours,

D. A. RHOADES,
Vice President and General Manager.

Subject: Notification of set-aside.

ALUMINUM IMPORT CORP.,
New York, N. Y.

GENTLEMEN: You will be governed by all applicable provisions of National Production Authority Order M–5A–Aluminum, dated May 6, 1953, as though you were a primary producer of aluminum.

Therefore, in accordance with section 9 of National Production Authority Order M–5A–Aluminum, it has been determined that the maximum aggregate quantity of aluminum for the shipment of which during any calendar month commencing with the month of July 1953 you are required to accept authorized controlled material orders bearing the program identification A, B, C, D, or E, and one digit, in accordance with section 21 of Defense Materials System Regulation 1 and section 6 of National Production Authority Order M–5A, is as follows. (Authorized controlled material orders bearing the symbol AM–9000 placed by distributors under section 12 of National Production Authority Order M–5A may not be included as part of the quantities specified below):

Product:	*Quantity (thousands of pounds)*
Pig or ingot, other than secondary	959

You are not required to accept any authorized controlled material orders bearing the program identification A, B, C, D, or E, and one digit, calling for delivery of any form or shape of aluminum other than that listed above.

Further, in addition to the quantity specified above, you are, pursuant to section 13 of National Production Authority Order M–5A, directed to accept and fill authorized controlled material orders from foil fabricators bearing the allotment symbol AF and placed in accordance with section 11, paragraphs (a) and (c) of National Production Authority Order M–5A and section 20 of Defense Materials System Regulation 1, up to a maximum quantity of 14,000 pounds of alumina per month.

Further, in addition to the quantities specified above, you are, pursuant to section 13 of the National Production Authority Order M–5A, directed to accept and fill authorized controlled material orders from powder fabricators bearing the allotment symbol AF and placed in accordance with section 11, paragraphs (b) and (c) of National Production Authority Order M–5A and section 20 of Defense Materials System Regulation 1, up to a maximum quantity of 900,000 pounds of aluminum per month.

Further, in addition to the quantities specified above, you are, pursuant to section 13 of the National Production Authority Order M–5A, directed to accept and fill authorized controlled material orders placed with you by the following independent fabricators of aluminum in accordance with section 10 of National Production Authority Order M–5A and section 20 of Defense Materials System Regulation 1, using the allotment symbol AM and the number shown below and

calling for delivery in any calendar month of aluminum in the aggregate quantities up to the amounts listed below:

AM No.	Independent fabricator	Quantity (thousands of pounds each month)
2160	John Aluminum & Brass Corp	388
2320	Michael Flynn Mfg. Co	6
2380	Harvey Machine Co	555
2520	National Extrusions & Mfg. Co	14
2620	Revere Copper & Brass, Inc	263
4160	General Cable Corp	4
5100	Michele Wire & Aluminum Co	29
1300	Fairmont Aluminum Co	190
1600	Scovill Manufacturing Co	22
1650	Sheet Aluminum Co	6
1660	United Smelting & Aluminum Co	25
	Total	1,400

In addition, for the month of July 1953 only, lead time shall commence May 15, 1953, in lieu of the 60 days provided for in schedule III of defense materials system regulation 1.

This letter replaces the telegraphic notification dated April 27, 1953, governing order acceptances calling for delivery in any month commencing with July 1953.

If you cannot comply with this requirement for any reason, communicate immediately by letter to the National Production Authority, Washington, D. C., Reference M–5A, stating reasons therefor.

Very truly yours,

_____ _____.

Gross shipments of aluminum mill shapes by integrated and nonintegrated producers, 1950–57 [1] *(Supersedes table dated Feb. 26, 1958)*

AMOUNTS IN THOUSANDS OF POUNDS

Mill Shapes	1950	1952	1953	1954	1955	1956	1957
Sheet and plate	1,028,131	991,788	1,269,850	1,057,485	1,465,696	1,510,335	1,321,584
Integrated producers	982,912	944,258	1,198,048	993,900	1,366,018	1,387,965	1,188,278
Nonintegrated producers	45,219	47,530	71,802	63,585	99,678	122,370	133,306
Foil	103,065	85,124	119,470	151,598	200,258	186,812	185,724
Integrated producers	75,050	57,832	82,567	105,242	142,696	136,878	140,260
Nonintegrated producers	28,015	27,292	36,903	46,356	57,562	49,934	45,464
Wire and covered cable	(2)	70,489	75,525	72,251	102,792	120,271	[4] 103,202
Integrated producers	(2)	42,814	45,075	41,079	60,223	60,985	53,736
Nonintegrated producers	(2)	27,675	30,450	31,172	42,569	59,286	[4] 49,466
ACSR and bare cable	132,710	176,754	140,550	147,166	157,237	188,282	[4] 181,701
Integrated producers	100,366	129,383	101,329	110,857	115,681	112,241	110,369
Nonintegrated producers	32,344	47,371	39,221	36,309	41,556	76,041	[4] 71,332
Extruded shapes and drawn tube	296,587	360,688	486,117	523,248	731,555	731,556	695,747
Integrated producers	193,849	217,910	274,856	244,933	325,908	284,949	271,665
Nonintegrated producers	102,738	142,778	211,261	278,315	405,647	446,607	424,082

PERCENT OF TOTALS

Mill shapes	1950	1952	1953	1954	1955	1956	1957	Percent change, 1950–57
Sheet and plate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	+28.5
Integrated producers	95.6	95.2	94.3	94.0	93.2	91.9	89.9	+20.9
Nonintegrated producers	4.4	4.8	5.7	6.0	6.8	8.1	10.1	+194.8
Foil	100.0	100.0	100.0	100.0	100.0	100.0	100.0	+80.2
Integrated producers	72.8	67.9	69.1	69.4	71.3	73.3	75.5	+86.9
Nonintegrated producers	27.2	32.1	30.9	30.6	28.7	26.7	24.5	+62.3
Wire and covered cable	100.0	100.0	100.0	100.0	100.0	100.0	100.0	[3]+46.4
Integrated producers	(1)	60.7	59.7	56.9	58.6	50.7	[4] 52.1	[3]+25.5
Nonintegrated producers	(1)	39.3	40.3	43.1	41.4	49.3	[4] 47.9	[3]+78.7
ACSR and bare cable	100.0	100.0	100.0	100.0	100.0	100.0	100.0	+36.9
Integrated producers	75.6	73.2	72.1	75.3	73.6	59.6	[4] 60.7	+10.0
Nonintegrated producers	24.4	26.8	27.9	24.7	26.4	40.4	[4] 39.3	+120.5
Extruded shapes and drawn tube	100.0	100.0	100.0	100.0	100.0	100.0	100.0	+134.6
Integrated producers	65.4	60.4	56.5	46.8	44.6	39.0	39.0	+40.1
Nonintegrated producers	34.6	39.6	43.5	53.2	55.4	61.0	61.0	+312.8

[1] Data are not available for 1951. Excludes captive producers, i. e., producers who do not sell the mill shapes produced but which they use in further fabrication.
[2] Not available.
[3] 1952–57.
[4] Revised.

NOTE.—Integrated producers are Alcoa, Reynolds, and Kaiser. Anaconda Aluminum Co. became a producer of primary aluminum in late 1955, but its affiliated companies, American Brass Co. and Anaconda Wire & Cable Co., are included here with nonintegrated producers to maintain continuity and avoid possible disclosure.

Source: Department of Commerce, BDSA, Aluminum and Magnesium Division, May 7, 1958.

APRIL 20, 1956.

To: Mr. J. S. Fidler, Revere office.
From: H. C. Wilson, New York office.

As you requested in your letter of April 6, we are attaching hereto ODM's original letter dated October 12, 1955, indicating that our TA–30303 is not eligible for accelerated amortization.

H. C. WILSON.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., October 12, 1955.

REVERE COPPER & BRASS, INC.
New York, N. Y.

GENTLEMEN: After careful consideration of your application for a necessity certificate, it has been determined that the facilities sought to be certified are not eligible for accelerated amortization under the provisions of section 124A of the Internal Revenue Code.

The principal reason in brief for the above determination is indicated below:

1. There is not presently an existing or prospective shortage in the interest of national defense of facilities for production of the material or service to be produced by the facilities sought to be certified.
2. The facilities sought to be certified are not within the scope of any expansion goal established by the Office of Defense Mobilization.
3. Construction, reconstruction, erection, or installation of the facilities sought to be certified was begun on or after March 1, 1952, and before the application was filed.
4. The application pertains to facilities acquired more than 6 months before the application was filed; or, to the acquisition of the productive assets of a going concern, or of second-hand facilities, and such acquisition will not benefit the national defense to a degree which warrants certification.
5. The facilities will be used in lieu of existing facilities and their construction, reconstruction, erection, installation, or acquisition are not considered extraordinary and necessitated by reason of the emergency.
6. The facilities are being acquired, constructed, etc., by a lessor for investment purposes, or, their location is not in accord with the national industrial dispersion policy; or, other provisions of ODM Regulation 1, as amended.

Any communications to the Office of Defense Mobilization regarding your application for a necessity certificate should be submitted in quadruplicate.

Sincerely yours,

F. L. PARNELL,
Chief, Finance Division, Production Area.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., March 30, 1956.

Mr. J. M. KENNEDY,
Chairman of the Board, Revere Copper & Brass, Inc.,
New York, N. Y.

DEAR MR. KENNEDY: It appears from your letter of February 21, 1956, that in mine of February 15, I did not adequately explain to you how industry's fulfillment of defense requirements for primary aluminum led to the denial of your application.

The revision of goal No. 63, on October 1, 1952, calling for an annual domestic aluminum capacity of 1,746,000 tons by January 1, 1955, represented the best estimate at that time of the capacity necessary to meet defense needs.

Thereafter, the entire aluminum situation—both capacity and requirements—was under almost continuous review. Reassessment was still under way at the beginning of 1955 when the target date was passed. Until the various factors entering into such reevaluation could be brought into focus, it was not appropriate to change the goal either as to capacity or target date.

By September 1955, when the goal was closed, it was fully apparent that not only would the capacity called for by the goal be achieved by expansions planned or underway but that such attainment would meet defense schedules, which had undergone considerable revision since 1952. It is now apparent that defense requirements will not only be met but will be exceeded.

The changes in the defense position in aluminum which had developed since the goal was set in 1952, were widely publicized on at least two occasions: A memorandum to the press of December 23, 1953, headed "Status of the Aluminum Expansion Goal," and release No. 238 of August 19, 1954, discontinuing the third round aluminum expansion program.

It is true that had you filed your application several months ahead of your actual filing date, your position in the line would have been improved; but there is no evidence that it would have led to certification since at least one application filed ahead of yours was also denied certification.

Government aid to the expansion of capacity and supply under congressional authority presently available to the Office of Defense Mobilization has the single purpose of promoting the national defense. With the expansion which is now planned or underway it appears that defense requirements will not only be met as scheduled but will be exceeded at each stage of the program. Consequently the need for incentive, in the form of accelerated tax amortization, no longer exists.

Sincerely yours,

ARTHUR S. FLEMMING, *Director.*

REVERE COPPER & BRASS, INC.,
July 6, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR SIR: This is to advise you that we are at present preparing an application for a necessity certificate, form ODMF–2, covering the construction of a 66,000-ton aluminum potline and the necessary electrical equipment. I am therefore requesting that we be given every possible consideration in a third-round aluminum expansion program.

Our company is presently engaged in the fabrication of aluminum sheet, aluminum extrusions, and aluminum tubing.

It is felt desirable that our intention to construct and operate a potline be made known to you at this time, so that we will receive consideration should the third-round expansion program be approved.

Papers covering the necessity certificate will be forwarded as soon as our engineering staff have completed their work.

I will appreciate very much an acknowledgment of this letter.

Sincerely yours,

_____,
Chairman of the Board.

REVERE COPPER & BRASS, INC.,
July 21, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR SIR: May I refer you to my letter of July 6, copy of which is attached, in which we expressed our intention of filing an application for a necessity certificate covering the construction of an aluminum potline.

I am writing you on the chance that my earlier letter has gone astray and will very much appreciate your acknowledgment.

Sincerely yours,

_____,
Chairman of the Board.

REVERE COPPER & BRASS, INC.,
August 1, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.
(Attention Mr. George A. Landry, Assistant Director for Production.)

DEAR SIR: Relative to your letter of July 26, which acknowledged my letter of July 6 advising you that we had in preparation an application for a necessity certificate for the construction of a 66,000-ton aluminum potline and the necessary electrical equipment, etc., I am formally advising you that this necessity

certificate is being filed tomorrow in Washington in the Office of Defense Mobilization by our manager of aluminum sales relations, Mr. Harold C. Wilson.

This necessity certificate covers an alumina and an aluminum reduction process with an output of alumina of 120,000 tons and aluminum pig of 60,000 tons per year respectively. The estimated cost of this project is $52,776,800 and the details are shown on the necessity certificate, which will be personally filed by our Mr. Wilson tomorrow, August 2, 1955.

Sincerely yours,

_____,
Chairman of the Board.

REVERE COPPER & BRASS, INC.,
August 2, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

(Attention Mr. George A. Landry, Assistant Director for Production.)

DEAR SIR: Reference is made to an application for necessity certificate TA–30303, filed by Revere Copper & Brass, Inc., covering facilities for the production of 120,000 tons per year of alumina and 60,000 tons per year of aluminum pig and/or ingot.

In connection with this application, we wish to advise you that the company is not requesting a market guaranty contract with the Government, but is prepared to sell the entire production of the proposed facilities on its own responsibility.

Nevertheless, if the Government sponsors a third round of expansion of primary alumina and if, as part of that expansion, it enters into market guaranty contracts or grants other benefits to applicants, then Revere would expect to receive similar consideration.

Sincerely yours,

_____,
Chairman of the Board.

REVERE COPPER AND BRASS, INC.

INTERNAL CORRESPONDENCE

AUGUST 3, 1955.

To: Mr. J. M. Kennedy, at New York office.
From: H. C. Wilson, at New York office.
Our reference: HCWMWS
Subject: Necessity certificate prime aluminum production.

On August 2d Mr. Jack Cardon of Lee, Toomey & Kent and I personally filed the subject necessity certificate with the Office of Defense Mobilization in Washington.

Our application has been assigned the following number: TA 30303.

At the identical time that we filed our application, Mr. Maxwell Kasky, of Reynolds Metals Co., was also filing applications covering aluminum price production, and their applications were in the amount of $197 million. The numbers assigned to their applications were 30305–6–7, and 8.

H. C. WILSON.

REVERE COPPER & BRASS, INC.,
September 14, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.:

In re primary aluminum project TA 30303, Mr. Harold Wilson reported matters covered in meeting with you yesterday. Assume that no additional information is required by you from Revere as none has been requested. We trust that your office will give favorable consideration to Revere's proposal. We are anxious to proceed as soon as possible. We have come into general agreement with an insurance company to cover the money needed for this expansion. We note in the Harvey announcement today that Government loan guaranty was offered and Revere are not requesting this. Today's press also announces further diversion stockpile aluminum. Completion of Revere's project will replace stockpile metal

with active productive capacity at decreased cost to Government and increased national security. We believe our project offers equivalent contribution to solution of problems in aluminum supply as others reported under consideration by your office. However, should you feel the need for any additional information or further discussion, I will gladly bring such officers of our corporation to your office as you may request. Would appreciate acknowledgment and comments.

J. M. KENNEDY,
Chairman of the Board.

REVERE COPPER & BRASS INC.

INTERNAL CORRESPONDENCE

SEPTEMBER 19, 1955.

To: Mr. J. M. Kennedy, New York office.
From: H. C. Wilson, New York office.
Our reference: HCW:MWS.
Subject: Prime aluminum production, TA–NC–30303.

I phoned Mr. Flemming's office and talked with his secretary, Miss Tyler, and asked her to determine whether your telegram of September 14 had been received by Mr. Flemming as it had not been acknowledged as requested.

She phoned me back to say that Mr. Flemming had your telegram on his desk and that he needed no further information and that he has not as yet made a decision on the matter.

She advised me that Dr. Flemming would acknowledge this wire but doubted that it would be this week because he is going out of town for the balance of this week.

H. C. WILSON.

REVERE COPPER & BRASS. INC.,
September 27, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR DR. FLEMMING: I wish to acknowledge your letter of September 26 in which you enclosed a press release showing that the primary aluminum expansion goal had been reached, and I assume the inference is made that our certificate of necessity will accordingly be rejected.

If this is the case, you are correct that the rejection of our certificate is not a satisfactory decision nor one which we willingly accept. We, of course, have noticed in the newspapers the most generous action on the Government's part on applications that have been before them, embodying many features we did not request. This puts us in an extremely bad competitive position were we to enter the primary aluminum field under such adverse circumstances. We would be the only company that has not received help from the Government along the way.

The insurance the Government gains in the defense program by having others in the primary aluminum field is extremely beneficial. The cost to the Government, should they grant us a necessity certificate, would be very small if, in fact, there would be any cost at all. As against that, you would have another producer in the field and on the basis of the projected use of aluminum in the next 20 years, it would appear obvious that present facilities are inadequate. The defense requirements for aluminum must follow almost percentagewise the projected use of the metal 10, 15, or 20 years from now even though the uses may not be apparent today.

The fact must remain that as matters now stand, we have been put in an untenable competitive position in the aluminum industry and opportunities that have been afforded to others are being denied us. I believe we are reasonable in requesting that we be put in the same competitive status by the Government's giving us help in one instance at least when they have given help to others in many instances in the past.

I would appreciate any suggestions you may have to offer.

Sincerely yours,

_____,
Chairman of the Board.

REVERE COPPER & BRASS, INC.,
December 15, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR DR. FLEMMING: Your letter of October 4 advising us of the closing of the aluminum expansion goal and the rejection of our application for a tax amortization certificate to cover our primary aluminum project was received while I was visiting our plant in Brazil.

The rejection of our certificate by you is not a satisfactory decision. We therefore seek relief. Your press release No. 434, dated September 22, states: "Any firm that feels that the closing of the goal has resulted in its being accorded inequitable treatment, may file a statement setting forth its grounds for such conclusions. Such a statement will be given consideration and if equitable relief is called for, it will be granted."

As stated in my letter of September 27 and confirmed by continued studies of this situation since my return from Brazil, I feel very strongly that rejection of our application for tax amortization places Revere in an untenable competitive position in the aluminum industry and denies us the opportunities that have been afforded all four present producers and two new companies in the primary aluminum field. These companies, with the help the Government has given them, have grown so strong that we will have difficulty competing with them under any conditions. Yet our application was rejected. Obviously this does not constitute equity.

In addition to the above, we have not asked for the kind of help the Government has given all the others. We have asked merely for a certificate to write off 85 percent of our capital expenditures through quick amortization. We have not asked for (*a*) guarantee of sale of our product, (*b*) Government purchase of our product, (*c*) Government funds or help in our financing, or (*d*) any of the other favorable clauses which have been generally accorded other members of the industry.

The advantage of a fast writeoff to us would mean that we would be able to reduce substantially a large indebtedness in a shorter period, which would lighten the burden of a carrying charge for a long period. The difference to the Government in granting us this type of certificate with no other favors is small indeed because the tax advantage we have for 5 years, while helpful to us in reducing our indebtedness, would mean higher tax payments for the 15 succeeding years. At the end of 20 years there would be very little difference between the amounts collected under the two systems and I am sure the Government accounting departments can indicate what this would mean in dollars and cents.

I am summarizing below facts and figures indicating the help all of the other primary producers have received and attached to this letter is schedule 1 comprising a brief summary of productive capacity in the domestic aluminum industry, both presently installed facilities and new expansions as we tabulate them from recent press reports. Of the present facilities of 1,533,000 tons, some 660,000 tons (42½ percent) have been constructed in the past 5-year (post-Korea) period by Alcoa, Reynolds, and Kaiser with generous Government assistance consisting of tax amortization, Government guarantee of private loans and market guarantee contracts. These contracts give the producers the right to "put" the entire output to the Government for purchase during the first 5 years of production in the event it cannot otherwise be sold or consumed by the producer.

The market guarantee contracts also contain a clause which permits the producers to construct additional aluminum pot lines and dispose of the output from such new facilities before exercising their contract "put rights" on contract facilities. This provision is covered in article VI, relationship of additional to existing facilities:

"It is recognized that the contractor now has other aluminum smelting facilities in operation and in course of construction and in the future may acquire further aluminum smelting facilities other than those to be constructed under this contract. It is understood that, except as to orders from the Government expressly placed pursuant to this contract for aluminum to be produced from the additional facilities, the contractor may first dispose of the production from such other facilities or utilites for its own purposes the production of such other facilities, before disposing of or utilizing aluminum from the additional facilities, and that, in accordance with paragraph 3 of article III, the Government will purchase from the contractor all of the production from the additional facilities not otherwise disposed of or utilized by the contractor."

As indicated in schedule 1, the major portion of the recently announced now expansion is proposed by the Big Three in the industry, Aloca, Reynolds, and Kaiser, all having market guarantee constructs covering production from their post-Korea facilities. Since these constructs run into mid-1958 and some into 1959, and since the producers are currently using in their own plants or selling to the indispendents their entire production, they can in effect reserve their "put rights" for possible use in ensuing their market for the production from the new facilities now in construction for the duration of present contracts.

As an example, let's look at Kaiser. Out of their present capacity of 415,000 tons per year, about 223,000 tons is underwritten by market guarantee contracts. They have now announced further expansion of some 227,000 tons to be completed in mid-1957. Kaiser, too, is currently using in their own plant or selling to the independents their entire present production. Thus their contracts with the Government for 225,000 tons per year give them a guaranteed market for virtually the entire output of the new facilities through 1958 and part of 1959. At today's market price for aluminum of $450 per ton, that guarantee is worth over $100 million.

I am sure you will agree that this constitutes a very decided advantage to the present producers and permits them to enjoy Government assistance on new projects even after the closing of the aluminum expansion goal. To deny our application for a tax certificate in the face of this situation constitutes in our judgment grossly inequitable treatment.

The present and proposed aluminum production facilities by the Big Three will account for 89.4 percent of the total aluminum production. Statements from a number of Government agencies have indicated the desirability of bringing new independent producers into the picture. I quote from a GSA bulletin dated September 20, 1955:

"From the inception of the first round (of aluminum expansion) and continuing to the present, the antitrust division of the Department of Justice and various congressional committees (such as the Joint Committee on Defense Production and the House Committee on Judiciary and Small Business) have strongly and repeatedly urged that the Government bring one or more new independent producers into the field in order to broaden the competitive basis and to strengthen national defense."

With reference to the aluminum project of the Harvey Machine Co., we have noted in the press the very exceptional assistance that the Government has offered this company in the form of a Government loan guaranty, a cash advance against future deliveries of aluminum, 5-year market guaranty contract, a power contract, and tax amortization assistance. Announcement of all this unusual Government help was made long after our application for a tax certificate was filed with your Agency.

In the December 9 edition of the Wall Street Journal we note that Olin-Mathieson have now been granted an additional tax certificate to cover the power plant for their aluminum project. This increases to over $100 million the amounts eligible for rapid writeoff which have been granted to this company.

To summarize, it is apparent that virtually all companies which have announced plans for new aluminum production have received and continue to receive generous Government assistance except Revere. As previously stated, this puts us in an untenable position and results in our being accorded inequitable treatment by the Government. We are not requesting loan guaranties nor contracts as have been offered to others. We do ask for a tax certificate.

With more direct reference to the national defense aspects of our application as discussed in your letter of October 4, I would like to submit the following for your consideration.

It is my understanding that your program for national security in aluminum includes a substantial stockpile of bauxite in addition to stockpile reserves of aluminum pig and increased productive capacity in the industry. While the stockpile of bauxite undoubtedly constitutes comforting insurance against the loss of ocean shipping in any war emergency, this material would be a greater asset if in the more advanced form of pig aluminum. Along these lines, an observation was made by the President's Cabinet Committee on Minerals Policy in its November 1954 report to the President as follows:

"Materials in the stockpile should also be upgraded to the point at which they are more readily usable in the economy * * * whereby electric power, transportation, manpower, facilities, and time * * * all of which will be short in time of war * * * are also stockpiled."

In view of the enormous amounts of electric power required to convert bauxite to aluminum and the undoubted shortage in electric power that would face industry in the event of a national emergency, it seems clear that the upgrading of bauxite was one of the more important programs the President's Committee had in mind when they drafted the above recommendation.

In line with this, Revere would be prepared to reserve a substantial percentage of its capacity for the upgrading of Government bauxite during the first 5 years of production in the event we are granted a tax certificate, and would be happy to make this a condition to the certificate. Such an agreement would definitely tie in our project to your defense program for aluminum and permit your application of tax amortization incentives to our proposal.

I would appreciate your again reviewing our application, both from the standpoint of equitable treatment within the industry as well as our offer to reserve a portion of our capacity to upgrade stockpile bauxite. I will look forward to an acknowledgment of this appeal and to your comments.

Sincerely yours,

_____ _____,
Chairman of the Board.

Aluminum industry capacity, Dec. 8, 1955, schedule 1—Present and future

[Annual tons]

Company	Present capacity	Percent of industry	Announced expansion	Revised total capacity	Percent of industry
Alcoa	655,000	42.7	131,000	786,000	35.7
Kaiser	415,000	27.1	227,000	642,000	29.2
Reynolds	403,000	26.3	135,000	538,000	24.5
Anaconda	60,000	3.9		60,000	2.7
Harvey			54,000	54,000	2.5
Olin			60,000	60,000	2.7
Revere			60,000	60,000	2.7
Total	1,533,000	100.0	667,000	2,200,000	100.0

Details of expansions	Annual capacity (tons)	Location	Completion year
Alcoa	65,000	Texas	1956.
	22,000	Wenatchee	1957.
	44,000	Massena, N. Y.	1960.
Kaiser	7,000	Tacoma	1955.
	220,000	Ohio Valley	1957–58.
Reynolds	10,000	Corpus Christi	1956.
	25,000	Lister Hill	1956.
	100,000	Ohio Valley	Probably 1958.

REVERE COPPER & BRASS, INC.,
October 6, 1955.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR MR. FLEMMING: In Mr. Kennedy's absence I wish to acknowledge your letter of October 4.

Mr. Kennedy is in Brazil and will not return to the office until the middle of October. I will refer your letter to him upon his return.

Yours very truly,

_____ _____,
Secretary to Mr. Kennedy.

REVERE COPPER & BRASS, INC.,
January 16, 1956.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR DR. FLEMMING: I wrote you under date of December 15 wherein I appealed from the decision you made denying us a certificate of necessity on our proposed primary aluminum project.

Our Mr. H. C. Wilson visited with you on December 20 and you advised him that you were going to answer my letter in detail. However, I have had no acknowledgment of my letter nor information from your office since that date. I would appreciate very much some advice from you as to when I will have a reply in my hands.

Sincerely yours,

_____ _____,
Chairman of the Board.

REVERE COPPER & BRASS, INC.,
January 30, 1956.

Hon. ARTHUR S. FLEMMING,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR MR. FLEMMING: I wrote you under date of December 15 and, not having received a reply I wrote you again on January 16. As yet, I still have no reply nor any indication when I will receive one.

As this matter is of great importance to us it would seem sufficient time has elapsed in which we might reasonably expect the courtesy of a reply.

Sincerely yours,

_____ _____,
Chairman of the Board.

REVERE COPPER & BRASS, INC.,
January 31, 1956.

Mr. VICTOR E. COOLEY,
Acting Director, Office of Defense Mobilization,
Washington, D. C.

DEAR MR. COOLEY: I wish to acknowledge receipt of your letter of January 30 relative to my letters of December 15 and January 16 with respect to application for a certificate of necessity on our proposed aluminum project.

Your letter crossed in the mail with my letter of January 30 to Dr. Flemming. I note that he will return from Europe February 3, and I will patiently await word from him in this matter.

Sincerely yours,

_____ _____,
Chairman of the Board.

REVERE COPPER & BRASS, INC.,
New York, N. Y., May 14, 1958.

Hon. SIDNEY R. YATES,
House Office Building, Washington, D. C.

DEAR CONGRESSMAN YATES: During the course of my testimony before Subcommittee No. 3 of the House Select Committee on Small Business on May 1 you asked about Revere's application for a necessity certificate for the construction of a facility to produce primary aluminum.

At that time I told you that we had made an application for a necessity certificate covering facilities to produce 120,000 tons of alumina and 60,000 tons of aluminum pig or ingot and that it was denied by the Office of Defense Mobilization on October 12, 1955. I understand that Mr. Gordon Gray, the Director of the Office of Defense Mobilization, testified before you a few days later that Revere had been granted a necessity certificate.

In view of the foregoing it seems to me that the record should contain some concrete evidence that the certificate for which we made application was denied. Accordingly I am enclosing copies of the entire correspondence between Revere and the Office of Defense Mobilization with respect to this application (TA–30303) and request that they be made part of the official transcript of the proceedings before your subcommittee.

Respectfully submitted.

C. A. MACFIE, *President.*

REVERE COPPER & BRASS, INC.,
February 21, 1956.

Dr. ARTHUR S. FLEMMING,
Director, Executive Office of the President,
Office of Defense Mobilization, Washington, D. C.

DEAR DR. FLEMMING: I appreciate receiving your letter of February 15 detailing at some length your procedures in closing the aluminum expansion goal and rejecting our application for tax amortization assistance to cover our primary aluminum project for the installation of a 60,000-ton reduction plant and related facility.

You state that the determining factor in disposing of pending applications in the aluminum goal area was the extent of the unfilled portion of the goal on August 12, 1955, the date on which the goal was placed on the suspended list. As of that date, and for sometime prior thereto, you added that there was no unfilled portion of the aluminum expansion goal for the reason that capacity in plants under consideration, and assured, was in excess of the expansion goal.

On the date we filed our TA application, August 3, 1955, the Government's announced expansion goal was 1,746,000 annual tons to be reached by 1955. As pointed out in our letter of December 15, the capacity of the domestic industry on that date was 1,533,000 annual tons, a deficit of 213,000 tons required to reach the Government's announced objective.

Against this deficit of 213,000 tons Olin Mathieson is proceeding with a 60,000-ton project. Alcoa, also, had announced prior to August 3 new programs totaling 131,000 tons. Of this quantity, however, some 60,000 tons to come from a rehabilitation of a portion of their Massena Works will not be available until completion of the St. Lawrence seaway project, scheduled for 1959–60. If it is the Government's desire to reinforce the basic aluminum productive capacity of the Nation at the earliest possible date, as would be indicated by a reading of your expansion goal, it is hard for me to understand how you can consider this particular expansion on the part of Alcoa as a portion of such goal, if you have alternatives before you which would provide increased capacity at an earlier date.

With reference to the project of the Harvey Aluminum Co., which I would understand you have also taken into consideration in your determination to close the goal, it is my understanding that despite the very generous assistance, both financial and contractual, which the Government has extended to this company, and despite the fact that such assistance has been in effect for several years, as is indicated in the GSA press release which you so kindly sent me with your letter, nevertheless this company has not yet actually started construction of their plant to the best of my knowledge. As of this date, however, it would seem to me that there might be some reasonable doubt as to whether their plant capacity should be included by you in the category of "assured capacity" in any determination as to the status of the aluminum expansion goal.

In the light of these factors, it seems to me that there was, in fact, room within the expansion goal for our 60,000-ton project and that your decision to close the goal without approving our certificate did not provide the Nation with the assurance that was available to you that the desired industry capacity of 1,746,000 annual tons would be reached at the earliest possible date.

It is quite true that, since your announcement of closing the expansion goal, both Reynolds and Kaiser have come forward with announced plans for further expansion. As I pointed out in very considerable detail in my letter of December 15, and, therefore, will not repeat now, both these companies, as well as Alcoa, are already working against vast programs of Government assistance extended in earlier days that run into 1958–59, which can be broadened to cover their entire operation and therefore minimize their financial risks in these new expansions. We would find it extremely difficult to compete with them under any conditions. Without a tax-amortization certificate to assist us in carrying the financial burden for the first 5 years, we will find it all but impossible.

With reference to our delay in filing our application for a tax certificate, we make it a practice, as a matter of company policy, not to file applications for Government assistance until our plans are sufficiently advanced so that we have every expectation of proceeding with the project once the certificate is granted. As we understand Government regulations, that is the way you want these matters handled. Apparently, if we had filed our application as soon as we first had the idea of examining the possibilities of entering the primary industry, we would have been given favorable treatment, regardless of the fact that we might not have proceeded for several years. We are now paying the penalty for having handled our application in strict accordance with our understanding of the Government's wishes.

At this time I can but repeat the statement in our letter of December 15 that I did not feel that Revere has been given equitable treatment in the handling of this tax-amortization application. In view of your statement in the press release of September 22 that a company will be given equitable relief in those cases where the closing of an expansion goal has resulted in its being accorded inequitable treatment, I continue of the opinion that our application should be reinstated and approved.

Sincerely yours,

_____,
Chairman of the Board.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., February 15, 1956.

Mr. J. M. KENNEDY,
Chairman of the Board, Revere Copper & Brass, Inc.,
New York, N. Y.

DEAR MR. KENNEDY: I appreciate very much receiving your letter of December 15, 1955, which was delivered to me by your vice president, Mr. Harold Wilson. As Mr. Wilson has undoubtedly reported to you, he and I went over the matter in some detail. At that time, I tried to place before him the position in which the Government finds itself at the present time. I feel sure that he has reported our conversation to you.

I am sorry that we have not had the opportunity of talking with one another about this matter. It is always much more satisfactory to exchange views orally than through correspondence. Nevertheless, I am desirious of dealing with each of the points raised by you in your communication.

I am sorry that a trip to Paris to participate in a NATO meeting has delayed the sending of this communication. In your letter you requested that your application for a necessity certificate, T. A. 30303, be reviewed both from the standpoint of equitable treatment within the industry as well as your offer to reserve a portion of your capacity to upgrade stockpile bauxite.

When the aluminum-expansion goal was closed on September 22, this Office extended an invitation to any firm to file an appeal if it had reason to believe that the manner in which the goal was closed resulted in its receiving inequitable treatment. The procedural rule for the equitable disposition of pending applications which is applied generally to all closed goals, including the aluminum-expansion goal, is that all pending applications which are otherwise eligible shall be certified on the basis of priority of filing to the extent of the unfilled portion of the goal at the time the goal is suspended or closed, whichever is earlier.

The determining factor in disposing of pending applications in the aluminum-goal area was the extent of the unfilled portion of the goal on August 12, 1955, the date on which the goal was placed on the suspended list. As of that date, and for some time prior thereto, there was no unfilled portion of the aluminum-expansion goal for the reason that capacity in place, under construction, and assured, was in excess of the expansion goal. The formal closing of the goal on September 22, 1955, constituted notice to all concerned, including pending applicants, that there was no defense need for granting accelerated tax amortization for further expansion of primary aluminum capacity.

It is to be expected that certain economic benefits will accrue to recipients of any or all of the several forms of financial inducements offered by the Government to bring about increases in capacity required for defense production. It is true, as you point out, that denial of your application deprives you of benefits that have been afforded all 4 present producers and 2 new companies in the primary aluminum field. It is equally true in regard to all other companies which are contemplating entering the primary aluminum field or any other area of production for which an expansion goal has been closed. This, however, does not constitute a basis for a plea of inequitable treatment by an applicant who, for any reason, has not done or timely offered to do that for which such economic benefits were initially offered. In other words, a plea for equitable treatment presupposes a showing that the appellant is in the same position as those who have received the benefits he is requesting. The fact that the original three primary producers undertook expansions at a time when there was a critical shortage of aluminum and no other companies were willing or able to do so puts them on a wholly different footing from that of Revere. Likewise, since the fourth producer and the other two companies to which you refer filed applications prior to the time the so-called third-round expansion goal was filled and at a time when the Gov-

ernment was trying, without much success, to get new producers into the primary aluminum field also puts such companies in a position of being entitled to certain considerations which Revere cannot properly claim since, by its own decision, it failed to put itself in the same position as those companies.

In regards to the several forms of financial assistance which were made available to the Harvey Machine Co., it must be kept in mind that the greater part of such allowances were made available to Harvey in the very early stages of the third round in regard to the primary aluminum expansion which it proposed to undertake, and that the balance was in consideration for the settlement of an anticipatory breach-of-contract action which the Harvey Co. proposed to bring against the Government. Attached hereto for your information is a General Services press release which sets forth a chronology of events leading to the settlement.

The statement which you read, that Olin Mathieson was granted an additional tax certificate to cover the powerplant for its aluminum project, was somewhat misleading. Actually, the power facilities for the Olin Mathieson expansion had been previously certified as a part of its proposed expansion program. Subsequently, due to a corporate reorganization, it was decided that title to the power facilities would be taken in the name of a company subsidiary. The statement you read referred to the certificate adjustment required by this corporate reorganization.

We appreciate your offer to reserve a substantial percentage of your capacity for the upgrading of stockpile bauxite during the first 5 years of operation. However, in view of our very satisfactory defense position in regard to both aluminum and alumina, and the current high level of economic activity, we have no immediate plans for the upgrading of bauxite.

If, after you have had the opportunity of reading this letter, you desire to discuss this matter with me further, I can assure you that I will be more than happy to do so.

Sincerely yours,

ARTHUR S. FLEMMING, *Director.*

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., January 30, 1956.

Mr. J. M. KENNEDY,
Chairman of the Board, Revere Copper & Brass, Inc.,
New York, N. Y.

DEAR MR. KENNEDY: This will acknowledge receipt of your letter of January 16 in which you refer to your previous letter of December 15 with respect to the application for a certificate of necessity on your proposed aluminum project.

Your letter of December 15 was under consideration by Mr. Flemming when he left for Europe on January 18. We will call this matter to his attention promptly upon his return on February 3.

Sincerely yours,

VICTOR E. COOLEY,
Acting Director.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., October 4, 1955.

Mr. J. M. KENNEDY,
Chairman of the Board,
Revere Copper & Brass, Inc., New York, N. Y.

DEAR MR. KENNEDY: I appreciated very much receiving your letter of September 27.

The section of the Internal Revenue Code under which we grant rapid tax amortization certificates reads, in part, as follows:

"(e) DETERMINATION OF ADJUSTED BASIS OF EMERGENCY.—In determining, for purposes of subsection (a) or (g), the adjusted basis of an emergency facility—

"(1) There shall be included only so much of the amount of the adjusted basis of such facility (computed without regard to this section) as is properly attributable to such construction, reconstruction, erection, installation, or acquisition after December 31, 1949, as the certifying authority, designated by the President by Executive Order, *has certified as necessary in the interest of national defense during the emergency period, and only such portion of such amount as such authority has certified as attributable to defense purposes.* * * *

[Emphasis supplied.]

In order to place the administration of this section on as sound a basis as possible, we have, over a period of the past few years, established expansion goals for specific areas. These goals have represented the best judgment of the Office of Defense Mobilization as to defense requirements, taking into consideration military requirements, defense or war-supporting requirements, and the needs of a rock-bottom civilian economy.

When our expansion goal has been reached, we have followed the practice of no longer accepting applications for tax-amortization certificates in that particular area. Oftentimes before closing the goal, we have reviewed the situation to determine whether from a defense point of view it should be increased.

We have made a careful review of the aluminum situation and have concluded that looking at it from the standpoint of our defense requirements we would not be justified in increasing the expansion goal. In making this review we recognized, of course, that there is a very heavy demand for aluminum at the present time and that, undoubtedly, this demand will increase. We concluded, however, that this demand is one which arises out of the needs of a rapidly expanding civilian economy.

We believe that when it is determined that our defense requirements have been met we should no longer use defense incentives in order to meet nondefense needs. If we should do so, it might very well result in the withdrawal of such incentives by the Congress. Then at a time when they would be needed, they would not be available.

It is true, of course, that whenever we close an expansion goal we are putting those who have received incentives under the goal in a position where they have some advantages over those who will make capital investments in these areas in the future. As I see it, however, the only way in which we can prevent such a situation from arising would be to continue to grant these incentives for an indefinite period without regard to our defense requirements. This would very clearly be both unwise and contrary to existing law. The recognition of the fact that such situations can arise has caused us to adhere strictly to the policy of considering applications for rapid tax amortization in the order in which they are received.

If this letter does not clarify in an adequate manner our position regarding this matter, I will be more than happy to have you get in touch with me again.

Very sincerely and cordially yours,

ARTHUR S. FLEMMING, *Director.*

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., September 26, 1955.

Mr. J. M. KENNEDY,
Chairman of the Board,
Revere Copper & Brass Co., New York, N. Y.

DEAR MR. KENNEDY: I appreciated very much receiving your letter of September 14, following the opportunity that I had of visiting with Mr. Harold Wilson.

I am enclosing a copy of the release which we have just issued setting forth our decision as far as aluminum is concerned.

I know that from your point of view this is not a satisfactory decision. On the other hand, I do hope that you understand our reasons for feeling it was necessary to make such a decision.

We feel that we must be very careful not to use the defense "tools" which have been given to us by the Congress for nondefense purposes.

Very sincerely and cordially yours,

ARTHUR S. FLEMMING, *Director.*

[For immediate release September 22, 1955]

EXECUTIVE OFFICE OF THE PRESIDENT, OFFICE OF DEFENSE MOBILIZATION

No. 434

The primary aluminum expansion goal was closed today by Arthur S. Flemming, Director of Defense Mobilization, after consultation with members of the Defense Mobilization Board.

The goal, which called for annual capacity of 1,746,000 tons by 1955, was closed because capacity in place, under construction and planned will reach a

total of 1,778,000 tons, exceeding the objective of the expansion goal by 32,000 tons.

Goals generally are closed whenever the total capacity—in place, under construction, and planned—equals or surpasses stated objectives.

The anticipated capacity of 1,778,000 tons consists of 1,533,000 tons of capacity now in place; 65,000 tons under construction by the Aluminum Company of America; and planned expansion of 180,000 tons, of which Harvey Machine Co., Inc., plans 54,000 tons, Olin-Mathieson Chemical Corp. 60,000 tons, and Alcoa 66,000 tons.

The Alcoa expansion program is being undertaken by the company without Government assistance. Certificates of necessity permitting rapid tax amortization have been granted to Harvey and Olin-Mathieson, and are still in effect. Harvey also has a purchase contract which grew out of a letter of intent issued in May 1953 and recently, due to special circumstances, the Government agreed to provide Harvey with additional assistance if the company could not obtain private financing.

Mr. Flemming said anticipated total capacity, which does not include tentative plans by other companies, appears sufficient to meet current stockpiling and defense programs as well as the needs of the military, military supporting facilities, and the essential civilian economy in the event of a defense emergency.

Government assistance for creating additional capacity, Mr. Flemming said, therefore no longer is warranted and applications on file for necessity certificates will be denied. Should anticipated expansion not materialize, the ODM Director said the goal would again be reviewed and reopened if necessary.

If a decision is made to reopen the goal applications now pending will be considered in the order they were filed. Mr. Flemming said also that a company's pending application for a certificate of necessity would not be prejudiced if it had started construction of a facility and the goal subsequently was reopened.

Mr. Flemming stated that, as has been the case in the past when goals have been closed, any firm that feels that the closing of the goal has resulted in its being accorded inequitable treatment may file a statement setting forth its grounds for such a conclusion. Such a statement will be given consideration and if equitable relief is called for it will be granted.

Rapid tax amortization and other authorized Government assistance have been made available when such assistance was found to be the incentive necessary to bring about the building by private enterprise of capacity required to overcome deficits in mobilization production facilities.

With Government assistance production of the industry has doubled since 1950. In addition to meeting defense needs the civilian economy has benefited from increased supplies of the metal.

Mr. Flemming noted that the present tight aluminum supply stems almost entirely from unprecedented civilian demand occasioned by new uses for the metal and the high level of civilian industrial activity. The problem of meeting civilian demand, he said, obviously is the responsibility of private enterprise.

LEE, TOOMEY & KENT,
Washington, D. C., August 2, 1955.

FINANCE DIVISION, PRODUCTION AREA,
Office of Defense Mobilization,
Washington, D. C.

GENTLEMEN: On behalf of Revere Copper & Brass, Inc., there is transmitted herewith an application for a necessity certificate covering facilities for the production of alumina and aluminum pig and/or ingot.

In the event you need any additional information, it will be appreciated if you will get in touch with this office.

Very truly yours,

JOHN A. CARDON.

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., July 26, 1955.

Mr. J. M. KENNEDY,
Chairman of the Board, Revere Copper & Brass, Inc.,
New York, N. Y.

DEAR MR. KENNEDY: Dr. Flemming has asked me to reply to your letter of July 6, in which you state that you have in preparation an application for a

necessity certificate covering the construction of a 66,000-ton aluminum potline and the necessary electrical equipment.

As you may know, the question of an expansion of the aluminum program is now under review. Should the expansion goal for aluminum be increased in volume, applications on file at that time will be given first consideration.

While letters indicating intent to apply for necessity certificates are of interest to us, formal applications only have official status.

Sincerely yours,

GEORGE A. LANDRY,
Assistant Director for Production.

JULY 6, 1955.

CALL ON THE OFFICE OF DEFENSE MOBILIZATION, WASHINGTON, D. C., JUNE 29, 1955

Mr. W. T. Bertier and I called on Mr. Ed Harris, Chief of the Light Metals Division, ODM, for the purpose of determining what essential data would be necessary to cover the filing of an application for rapid tax amortization for an aluminum prime metal producing plant. Mr. Harris indicated that such an application could be filed with general information which would be subject to amending after an engineering study had been completed and a site had been selected. He indicated that our initial application could cover a general area of location with the statement that the precise site would be submitted later for final approval. We believe that this visit resulted in our obtaining data that will permit us to file our application.

Mr. Harris indicated that there was a considerable amount of interest in the third round aluminum expansion program but did not mention any names. He strongly urged that we do file for a certificate as promptly as possible. I asked whether it might be to our advantage to have a letter written to Mr. Fleming, or a personal call made, either by Mr. Kennedy or Mr. Macfie, briefly outlining our interest and advising him that we were filing for a TA. Mr. Harris indicated that he thought it would be an excellent idea. Mr. Fleming is in the midst of this third round expansion program right now and it is a matter of much interest and concern to him. If we were to file our TA, it may not come to his personal attention whereas a letter or call directed to him would fully acquaint him with our plans. It is my opinion that they would welcome people other than the Big Three in the third round expansion program.

I checked further as to avoiding publicity were we to file, and I find the only way we might avoid publicity would be by covering ourselves with only a letter to Mr. Fleming, but there is a question as to whether this would give us the protection that an application on file would afford.

We did learn that Reynolds plans to add 30 million pounds of annual prime metal production at Lister Hill and they are planning on a 1,000-ton plant to be powered by coal with final plant site not yet determined.

H. C. WILSON.

ALUMINIUM LIMITED SALES, INC.,
New York, May 28, 1958.

Hon. TIMOTHY P. SHEEHAN,
House of Representatives,
Washington, D. C.

DEAR CONGRESSMAN SHEEHAN: At the hearing of Subcommittee No. 3 on March 12 you asked Mr. Nathanael V. Davis, president of our parent company, Aluminium, Ltd., if he could give the subcommittee additional details regarding the technical service we provide to aluminum fabricators in this country so that the subcommittee would have a clearer idea regarding it. As our company has a staff in this office coordinating this service, Mr. Davis has asked us to furnish the information to you.

In general we supply technical service to the independents as if they were our fabricating outlets in this country. The distinction between our company and other primary ingot suppliers is that we make our technical service available to the users of ingot while the other suppliers concentrate on helping those companies which are outlets for semifabricated products such as sheet, rod, extrusions, etc.

There are two types of technical service which we provide to the users of ingot. One is assistance in the operation of plant equipment for which a permanent staff of about half a dozen specialists on the staff of the Aluminum Company of Canada,

Ltd., is continually available. They make frequent visits to customer plants in the United States on request or accompany United States customers to Alcan's plants in Canada when this is a better method of imparting technique. The staff, which includes specialists in melting, and casting, extruding, rolling (sheet, rod, and foil) and anodizing is being expanded to meet an increasing demand for this type of technical service.

The operating assistance visits (to customer's plant or to an Alcan plant in Canada) in 1957, calculated in man-days, amounted to the following:

	Man-days
Extrusion plus extrusion ingot casting	92
Rolling (sheet, foil, rod)	30
Continuous rolling mills	12

Present plans call for a doubling of this activity during the period July 1, 1958, to June 30, 1959. The staff also provides considerable operating advice by correspondence.

The second type of service is the engineering of plant expansions or improvements and includes capital cost studies, advice on plant layout, and choice or specification of equipment. A staff under the administration of the chief engineer of Aluminium Laboratories, Ltd., provides this engineering advisory service. It supplements the operating advisory service described above and is identical with that rendered to Aluminium, Ltd's, own fabricating subsidiaries in Canada and abroad.

In addition to the operating and engineering advisory services described above, we undertake the development of new ingot products and fabrication processes for the independent user of ingot. New ingot forms recently made available to the independents are T-ingot and extrusion ingot cast to a fraction of commercial tolerance to reduce scalping scrap. We alone currently offer to independents the ingot alloys D5OS (for high strength bus bar) and 5357 (to compete with chrome-plated steel or brass). We are also the only primary ingot supplier offering sheet ingot and wire bar to independents in our published price lists.

Additional ingot products intended to help the independent fabricator improve his product or lower his costs are being brought out regularly.

In addition to these activities, Aluminium Limited spends considerable money in the United States in the development of new ways for independents to fabricate aluminum. The biggest single current item in this expense is an endeavor to reduce the high capital and production costs of hot-rolling through direct, horizontal continuous casting and rolling. Two processes are being actively worked on. The success of this project is expected to have a profound effect on the ability of nonintegrated companies to enter and expand in the sheet rolling field.

Finally, we are active in the distribution of technical papers including our own research results which are especially pertinent to the independent semifabricating trade.

The activities described above reflect our specialization in this country in the manufacture and sale of ingot products, to the exclusion of semifabricated products. We also believe they characterize our belief in the health and future of the independent aluminum fabricating industry.

Very truly yours,

T. E. COVEL, *Vice President.*

Revere shipments by size of accounts and markets, 1957

Size of account	Percent of total customers	Percent of total pounds
Under 10,000 pounds	56	3
Over 10,000 to 100,000 pounds	33	24
Over 100,000 to 500,000 pounds	9	38
Over 500,000 pounds (exclusive of interplant shipments)	2	35
Total	100	100

Markets:	Percent of total pounds
Building products	38
Consumer durable goods	17
Transportation	8
Electrical	5
Machinery and equipment	6
Containers and packaging	8
Distributors and jobbers	9
Miscellaneous	9
Total	100

GENERAL MOTORS CORP.,
Detroit, Mich., January 7, 1958.

Hon. SIDNEY R. YATES,
Chairman, Subcommittee No. 3, Select Committee on Small Business, House of Representatives, Washington, D. C.

DEAR CONGRESSMAN YATES: At the hearing of Subcommittee held on November 19, 1957, Congressman Multer requested (report, pp. 271–272), that I supply the subcommittee with certain statistics relating to our purchases of fabricated aluminum material from our suppliers. This information has been obtained and is set forth in the following table:

[Thousands omitted]

Suppliers by number of employees	1956				10 months, 1957			
	Suppliers		Total purchases		Suppliers		Total purchases	
	Number	Percent	Amount	Percent	Number	Percent	Amount	Percent
1 to 100	79	34.8	$3,293	3.0	113	41.9	$3,802	4.0
101 to 250	48	21.2	6,431	5.8	53	19.6	6,420	6.8
251 to 500	35	15.4	6,705	6.1	37	13.7	7,752	8.2
501 and above	65	28.6	93,828	85.1	67	24.8	76,875	81.0
Total	227	100.0	110,257	100.0	270	100.0	94,849	100.0

The purchases totaling $93,828,000 for the year 1956 from suppliers employing more than 500 employees include purchases of raw material and semifinished aluminum from the Aluminum Company of America, Aluminum, Ltd., Reynolds Metals Co., Kaiser Aluminum & Chemical Sales, Inc., and Anaconda Sales Co., which are the 5 reduction mills from which we purchased primary raw material in the form of pig or molten metal. It would be impracticable to determine, from the available records, the breakdown of our total purchases from these reduction mills between raw materials, semifinished materials, and fabricated parts.

Similarly, our purchases of $76,875,000 during the first 10 months of 1957 from suppliers employing more than 500 employees include the purchase of raw material and semifinished aluminum.

In reviewing the record of my testimony before the subcommittee I note that I stated (report, p. 231) that we are currently purchasing fabricated material from 171 fabricators. A review of the purchase records of the divisions indicates that this number should be 227 for the year 1956 and 270 for the first 10 months of 1957.

We have been delayed in submitting this material because it was necessary for us to make a detailed examination of records at widely scattered locations.

I wish to thank you and the other members of the subcommittee for the courtesies extended to me and to my staff during the hearing.

Very truly yours,

J. J. CRONIN,
Vice President, Manufacturing Staff.

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